DOCUMENT RESUME

ED 293 449 HE 021 362

AUTHOR	Dickey, Ann K., Ed.
TITLE	Managing Education Better: Technology and Tomorrow. General Sessions Presentations. Proceedings of the Annual Forum of the Association for Institutional Research (27th, Kansas City, Missouri, May 3-6, 1987).
INSTITUTION	Association for Institutional Research.
PUB DATE	88
NOTE	52p.
PUB TYPE	Collected Works - Conference Proceedings (021)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	Accreditation (Institutions); *Administration; *Administrative Policy; Administrator Evaluation; Administrator Role; Administrators; Higher Education; *Information Technology; Institutional Evaluation; *Student College Relationship
IDENTIFIERS	*AIR Forum; Managerial Communication

ABSTRACT

The 1987 Association for Institutional Research annual forum theme, "Managing Education Better," is covered by keynote and general sessions speakers from four angles: (1) how to study the student, (2) effects of different presidential styles, (3) the changing role of information technology, and (4) evaluating the effectiveness of our processes. After an introduction by Gerald W. McLaughlin, the forum chair, the following papers are presented: "Managing Education Better: Some Thoughts on the Management of Student Culture in American Colleges and Universities" (John Van Maanen); "Executive Leadership: The Pros and the Cons" (Brunetta Reid Wolfman and Burton I. Wolfman); "Information Technology: Using It in Relevant Ways" (Christine V. Bullen); and "Assessment, Accreditation, and Institutional Effectiveness: Implications for Our Profession" (Donald J. Reichard and Theodore J. Marchese). References are included with each paper. (SM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED293449

AIR

for Management Research, Policy Analysis, and Planning

Managing Education Better: Technology and Tomorrow

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

AIR

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

General Session Presentations
27th Annual Forum
Association for Institutional Research
Kansas City, Missouri May 3 – 6, 1987

HE 021 362

1986-87 EXECUTIVE COMMITTEE

DONALD J. REICHARD (president), University of North Carolina-Greensboro
LAURA E. SAUNDERS (vice president), University of Washington
MARILYN MCCOY (immediate past president), Northwestern University
JAMES O. NICHOLS (treasurer), University of Mississippi
WILLIAM P. FENSTEMACHER (secretary), Boston University
GERALD W. MCLAUGHLIN (Forum chair), Virginia Polytechnic Inst./State University
MELODIE E. CHRISTAL (associate Forum Chair), National Center for Higher Education Management Systems (NCHEMS)
HORACE F. GRIFFITTS (member-at-large), Tarrant County Junior College District
MARGARET L. (PEGGY) MOORE (member-at-large), The Chrysler Museum
THALY NILSSON (member-at-large), University of Uppsala
PENNY A. WALLHAUS (member-at-large), Northwestern University

1987 FORUM COMMITTEE CHAIRS

GERALD W. MCLAUGHLIN (Forum chair), Virginia Polytechnic Inst./State University
MELODIE E. CHRISTAL (associate Forum chair/late-breaking issues), NCHEMS
DEBORAH J. TEETER (local arrangements), University of Kansas
JANA B. MATTHEWS (general sessions/symposia), M & H Group, Inc.
DONALD S. DOUCETTE (Track 1: Enrollment Management), Johnson County Community College
MARY K. KINNICK (Track 2: Student Learning & Outcomes), Portland State Univ.
JANIS H. WEISS (Track 3: Academic Affairs), North Hennepin Community College
G. GREGORY LOZIER (Track 4: Human, Financial & Physical Resources), Pennsylvania State University
FRANK A. SCHMIDTLEIN (Track 5: Planning, Policy Management & Governance), National Center for Postsecondary Governance & Finance
RICHARD D. HOWARD (Track 6: Theory & Practice of Institutional Research), North Carolina State University
DENNIS D. HENGSTLER (Track 7: Technology & Tools for Institutional Research), University of Houston-University Park
JEAN J. ENDO (table topics), University of Colorado-Boulder
LINDA W. MANNERING (demonstrations), University of Kansas
JOHN P. (PHIL) ORAHOOD (vendor exhibits), Arkansas Dept. of Computer Services
MARY ALYCE ORAHOOD (vendor exhibits), University of Arkansas-Little Rock
CHARLES L. VAN MIDDLESWORTH (professional development opportunities), Kansas City (Kansas) Community College
LINDA K. PRATT (workshops), North Carolina Central University
GERLINDA S. MELCHIORI (practica), University of Michigan
JULIA M. DUCKWALL (newcomers), University of Missouri-Kansas City
GERALD H. LUNNEY (special interest groups), Council of Independent Kentucky Colleges & Universities
JEFFREY A. SEYBERT (evaluation), Johnson County Community College
MARILYN K. BROWN (seminar /symposia reporters), Univ. of Maryland-College Park
JOHN R. CALVERT (European Forum representative), Loughborough Univ. of Technology

1986-87 PROFESSIONAL DEVELOPMENT SERVICES BOARD

MARGARET L. (PEGGY) MOORE (chair), The Chrysler Museum
JOHN A. DUNN, JR., Tufts University
GERLINDA S. MELCHIORI, University of Michigan
LINDA K. PRATT, North Carolina Central University
TIMOTHY R. SANFORD, University of North Carolina-Chapel Hill
JACQUELINE M. SKUBAL, South Carolina State College
CHARLES L. VAN MIDDLESWORTH, Kansas City (Kansas) Community College

AIR

for Management Research, Policy Analysis, and Planning

Managing Education Better: Technology and Tomorrow

General Session Presentations
27th Annual Forum
Association for Institutional Research
Kansas City, Missouri May 3 – 6, 1987

1986-87 PUBLICATIONS BOARD

PENNY A. WALLHAUS, (chair), Northwestern University
ELLEN E. CHAFFEE, North Dakota Board of Higher Education
CAMERON L. FINCHER, University of Georgia
STEPHEN R. HAMPLE, Finan Network Investment Corp.
MANTHA V. MEHALLIS, Broward Community College
JOHN C. SMART, Virginia Polytechnic Institute and State University

Ex-Officio Members of the Publications Board

ANN K. DICKEY, Editor, Forum publications, Saginaw Valley State University
CHARLES F. ELTON, Editor, Research in Higher Education, University of Kentucky
JOHN A. LUCAS, Editor, AIR Professional File, William Rainey Harper College
PATRICK T. TERENZINI, Editor, New Directions for Institutional Research, University of Georgia

1987 FORUM PUBLICATIONS EDITORIAL ADVISORY COMMITTEE

ANN K. DICKEY, (editor), Saginaw Valley State University
TERESA KAROLEWSKI, (associate editor), George Brown College of Applied Arts & Technology
EDWARD L. DELANEY, George Mason University
FRANK G. DIJKMAN, University of Utrecht
JUDITH I. GILL, Washington Council of Presidents Office
HEATHER J. HABERAECKER, Northeastern Illinois University
CAROL S. HOLLINS, John Tyler Community College
ANTHONY LOLLI, University of Rochester
LINDA K. PRATT, North Carolina Central University
RICHARD F. WILSON, University of Illinois-Urbana/Champaign

Ann K. Dickey, Editor

Copyright 1988

The Association for Institutional Research
314 Stone Building, Florida State University
Tallahassee, Florida 32306
Telephone: (904) 644-4470
Jean C. Chulak, Administrative Director

TABLE OF CONTENTS

Introduction
Gerald W. McLaughlin iv

Managing Student Cultures in American Colleges and Universities
(keynote address)
John Van Maanan 1

Executive Leadership: the Pros and Cons
(address)
Brunetta R. Wolfman and Burton I. Wolfman 11

Information Technology: Using it in Relevant Ways
(address)
Christine V. Bullen 19

Assessment, Accreditation, and Institutional Effectiveness: Implications for Our Profession
(presidential session)
Donald J. Reichard and Theodore J. Marchese 27

And Finally . . . the Airtones
(awards luncheon entertainment) 43

INTRODUCTION

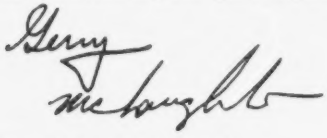
The Twenty-Seventh Annual Forum of the Association for Institutional Research provided professional development and networking opportunities that were both rich and varied.

General session speakers approached the conference theme, "Managing Education Better," from four angles. They discussed: 1) how to study the unique element of our enterprise, the student; 2) the effects of different presidential styles; 3) the changing role of information technology, and 4) evaluating the effectiveness of our processes. Individual presentations, workshops, practica, and seminars helped develop the professional skills we use to support decision-making in higher education. These presentations were structured into seven functional areas within which our responsibilities are found.

This use of functional tracks, continued from the Orlando Forum, was helpful in establishing groups within which individuals could meet others with similar concerns. Special Interest Groups based on content, institution type, and region also supported networking, as did expanded use of table topics, newcomers' sessions, and special events.

If you were in KC, I hope you enjoyed the conference. If you were unable to attend, I trust that the following materials from the Forum will be beneficial to you.

I also hope that we will all get to Arizona where the Forum will focus us on "Promoting Quality Through Leadership." In addition to attending, please share your insights and concerns. The real strength of our Association is your participation.



Gerald W. McLaughlin
Forum Chair

MANAGING EDUCATION BETTER: SOME THOUGHTS ON THE MANAGEMENT OF STUDENT CULTURE IN AMERICAN COLLEGES AND UNIVERSITIES

(keynote address)

John Van Maanen, Professor
Sloan School of Management
Massachusettes Institute of Technology

(This is an edited record of an address presented in the Count Basie Ballroom of the Vista International Hotel, in Kansas City, Missouri, on Sunday evening, May 3, 1987.)

All desperados of the podium know that justifying one's presence on a public platform is a tricky matter. One's words must be sufficiently authoritative to carry weight, but not carry so much weight as to sink the whole enterprise. More importantly, a keynote speaker is under some obligation to show that he shares with his audience proper respect for the topics to be considered -- in our case, colleges and universities and the natives within them. On this score I can say that, like most of you, I find college life rich, varied, exciting and worthy. In fact, I so enjoyed college as a student that I managed to attend six of them, and as a faculty member I have almost equalled that count by obtaining visitation rights. I regard the campus as a warmer and better place to be than the grim corridors of IBM, US Steel, or General Motors -- and far better than being trapped on the DC shuttle in behalf of a governmental agency. I suppose I've come to appreciate university life so thoroughly that I am constitutionally unfit for any other employment. While I will have some sharp comments to make about the organizations of our mutual association, I make them with a deep and abiding concern and interest in their welfare.

Colleges and universities in any society -- and this one in particular -- take on goals that carry enormous ambition and conceit. They have, as many have suggested, an impossible mandate. To offer up a common one: Higher education is to "fulfill and transform" students, to make them smarter, wiser, more skilled and competent in matters of value to the society as well more "concerned, enlightened and complete" human beings. If this vision is shared, as I think it is, the means to its achievement are remarkably varied. As Paul Fussell (1983, p.135) suggests, our current situation is not so very different from what it was in the 1870s, when unnaturally proud citizens could exult: "There are two universities in England, four in France, ten in Prussia, and thirty-seven in Ohio."

We now have some 12 to 14 million students in some 3,000 to 4,000 two-year and four-year institutions. There are the Lutheran colleges of Lake Wobegone, the urban Catholic universities, the elite Ivies, the seven sisters, military academies, women's colleges, black colleges, community colleges, open-door colleges, technical and agricultural colleges, walled-in colleges and colleges without walls, colleges offering hardy vocational programs in business or engineering, and colleges -- limping along these days -- promoting cultural capital in ancient Greek or modern philosophy. There are also colleges built around monumental football stadiums with trophy case shrines and those built around prayer towers or cyclotrons. Each has a unique history, set of traditions, and special sense of worth.

It is clear that associated with this situation is a good deal of national pride, vested largely in the numbers of students we manage to pump into and out of these institutions each year. We are probably the only nation that displays such pride in public by the decals we place on our family cars. So sacred is college that not to put State U or Apache Creek Community College on display when our association warrants it is something of a sacrilege.

The basis of such pride and honor seems many times to be somewhat misplaced, having little to do with the quality of college in the sense of to "fulfill and transform." It rests too often on that good old American practice that Veblen labelled "invidious display," the art of being one up on one's neighbor. It stems also from rivalry among colleges for the loyalties and affections of the citizenry. Such status-mongering reflects, however, some hard economic facts whereby some institutions swell and others shrink on the basis of their reputations. From this perspective, it is not surprising that making the Sweet Sixteen of the annual NCAA basketball tournament does far more for the resource base of a college than placing 16 graduates at Oxford as Rhodes Scholars.

A good deal of our talk about colleges and universities rests on culturally specific, economically constrained and emotionally laden facts, for it is by no means clear what constitutes the "good college." The criteria are multiple, particularistic, emergent and, when the chips are down, conflictual. In this context, consider what seems to be a growing national hysteria about what many take to be a general decline in the educational quality of American institutions. Much of this worry is directed at the elementary and secondary schools, but certainly some of it is reserved for colleges and universities. Even the most honored are not spared criticism.

Current concerns are indexed by the formation of national panels to address educational problems. State legislatures call for the testing of our college grads to assure their constituents that our baccalaureate programs are producing the educated widgets we claim. New presidents and deans are installed in our universities explicitly to recharge educational batteries. Faculty and administrators convene across the land to ponder once again what kinds of distribution requirements, enriched majors, standardized programs or core curricula are needed to meet the "new" challenges posed by technology, science, language or society. The recent unrest and high anxiety seems to have little to do with students or university life per se; it reflects instead a kind of face-saving nationalism (or chauvinism) reminiscent of the years following the Russian success with Sputnik. Our curricular marines are now being called out to fix things up and restore our national pride and competitiveness. Predictably, the call is for measurable outputs, no-nonsense leadership, better inputs, tightened-up requirements, remedial programs, doing away with the slack so we can become lean and mean again, more accountability, streamlined course offerings, better instruction or, put more crudely, "more bang for the buck."

Unfortunately, in this presumed ratcheting-up of our educational plans and plants, precious little attention seems to be given to the natives' point of view -- the natives being our beleaguered and belabored undergraduate students. To understand the native requires a good deal more than testing. It requires us to pause for a moment and consider the possibility that cultural matters may well be the integral, dynamic and primary determinants of students' performance, more important than the market economy and the wish for social mobility.

With that in mind, what can we say about student culture? We can begin by saying something of its character. I once asked an MIT student of mine to provide a definition for the Institute's culture. Without batting an eye, she responded by

saying: "It's everything we aren't tested on in the classroom." However little this may be at MIT, it's a damn good answer. Student culture consists of the taken-for-granted patterns of eating, sleeping, socializing; the embraced and disgraced habits of study; the rules of thumb about what activities on campus count as status-enhancing or status-degrading; the norms surrounding what is proper demeanor in and out of the classroom; the loose consensus among students as to which classes are "gut" and which are not; the grapevine gossip that tells students which teachers to take and which to avoid, and so forth. Student cultures offer their members thick and thin guidelines for how to get an education, and thus define for students just what an education means. They vary within and between campuses but, rest assured, they are present.

They are present largely because we, as agents or managers of student lives, bring together large numbers of like-minded people at one time, in one place, there to be "batch-processed" through a lengthy sequence marked by specific problems that are best solved collectively rather than individually. The functional utility of student cultures is most clearly seen in the numerous studies of student failure. Such studies demonstrate over and over that those students least likely to graduate or otherwise do well in school are those with the fewest social ties to fellow students. "Fitting in" is as important to success in college as it is anywhere else in the world.

The hard questions we must ask, then, do not question the existence of student cultures, but rather concern their vitality, orientation and the lessons students learn as a natural consequence of their membership. Are they supportive of our educational ideals? Are they disruptive? More importantly, perhaps, are they open and caring, respectful of others, and embracing of values that foster growth and maturity? Or are they closed, exclusionary enclaves of homogeneity, cynical of societal values and concerned only with "making out" in college and beyond? Are they, as Time Magazine might put it, "self-policed bastions of stifling conformity and the me-first ethic?"

Needless to say, there aren't categorical answers to questions such as these. What is categorical is the extent to which college administrators and faculty set the tone for these cultures and, consciously or unconsciously, manage them through a vast number of big and little decisions that quietly direct student life. The message I bring is that student cultures produce failures of a collective sort -- as seems apparent when libraries go unused, soft, unchallenging course loads become the favored means to a degree, sullen, silent students sit listlessly through classes, scholarly traditions go by the wayside, or self-indulgent rites of spring extend from September through June. It makes as little sense to fault the students or their backgrounds for such matters as it does to blame victims for the rise of urban crime.

Let me illustrate what I mean by providing a few brief sketches of some problematic areas of student life. These are domains that I think vitally important, but they are woefully neglected in our research and discourse on college and universities. There is some bias here, since these are areas with which I have some personal experience, but they do illustrate well the kinds of problems student cultures seem to organize around. If we are ever to manage education better, it is clear that we must learn to address questions such as these.

Consider, first, what happens to students during their pre-enrollment days when they are prospective freshman, i.e. highly-valued "game" in these days of scarcity, retrenchment and declining enrollments. Sociologists regard this period as an initiatory phase of cultural learning and note its marked impact on

each and every recruit. What do we do to students before they pass through our hallowed gates?

In a word, we "rush" them. Fairs, telephone campaigns, mass mailings, pamphleteering, alumni contacts and, somewhat euphemistically, "selection interviews," are a few of the forms the rush takes. The content of these events and materials can be glimpsed in the ubiquitous recruiting brochure. Those I've looked at suggest that virtually all college classes are held outside, on warm, sunny days, next to large bodies of water, presided over by casually-attired (but serious) white males of rugged (but youthful) appearance who sit surrounded by adoring students in the shade of a spreading elm. Prospective students who actually show up on campus for the much recommended "personal visit" seem to do a little better than brochure readers -- but not much. I recently witnessed a campus tour that included stops at the underground mini-mall on campus, the student union, the alumni pool, a student pub, a large-screen TV salon and the steps, but not the interior, of the library, lecture halls and faculty office buildings. The tour ended next to a Mr. Money instant cash machine located in the lobby of a towering student dorm.

The distinct impression one gets from such a rush is that education itself doesn't sell very well. We display precious little interest in letting students in on the arcane secrets of just who teaches what to freshmen and just when and where such instruction might take place. "Market share" is apparently the bottom-line; and if we squirm a little at such a vulgar characterization, let's all squirm some more by considering an ad for a university admissions director that appeared recently in The New York Times Education Section. It asked for resumes from those with a "good speaking voice, telephone skills, and the ability to close." (quoted in Boyer, 1987, p. 22).

The fact of the matter is that more and more colleges, public and private, are enrollment- or tuition-driven enterprises engaged in a fierce survival game. A recent Carnegie Commission report on higher education suggests that fewer than 50 four-year colleges and universities can be considered selective under the most generous criteria: accepting fewer than half of those who apply. The average acceptance rate in four-year institutions is three out of four, and about 35 percent of our institutions are virtually open-door. Little wonder "market share" and other jargon of the biz school have penetrated the admissions office of Shady U.

What does all this mean to potential recruits? Confusion, of course, since a babble of claims of what Shady U or Beachfront Tech can do for John or Mary fills the air. The order of the day seems to be inflated expectations as to what college offers and a general lack of realism about what is required of students. Not all of this confusion results from our recruiting practices; some of it can be traced to the growing gap between secondary and post-secondary education. The upshot of all this is that our high-choice system for selecting a college and starting college life is fairly chaotic, frantic and personalized.

Such a context sets up the "reality shock" of the initiatory period of college careers. As it occurs in many schools, a more poorly-managed process is difficult to imagine. Too often, our student newcomers receive the residuals of whatever strengths an institution has to offer. Undergraduate, lower-division courses are characterized by their large size, their stiff lecture and recitation format, their standardized materials, their general lack of excitement, and their impersonal evaluation procedures. Typically they are taught by low-status, inexperienced faculty as distressed by the classroom situation as the students.

This seems true across the mix of institutions, notwithstanding a few well-publicized exceptions that essentially prove the rule.

Placed against the high expectations generated by selection practices, the reality shock for many is devastating. Turnover statistics bear this out. One of the more distinctive features of the American system of higher education, compared to other systems, is the restlessness and apparent dissatisfaction expressed by students whose academic careers may touch more than one school. (This is said by one whose Bachelor of Arts degree was earned at five different colleges!)

Particularly poignant examples of our failure to treat seriously the old adage about first impressions being lasting are seen during the initial few weeks of campus life for common-denominator freshmen. Few students report any sense of being inducted into or embraced by a special community. Orientation programs seem to be catch-as-catch-can, voluntary affairs that pay little heed to the fact that the first few weeks on campus are critically important in terms of establishing daily routines, setting study patterns, developing local friendships and forming attitudes about college life. Given that about 30 percent of all our students are now part-time and more than twice that percentage commute, this failure to manage well the take-off stage of college life is particularly disturbing.

Consider, also, life-after-entry and the routinization and down-to-earth details of student life. There are 168 hours in the week. If a student attends class an average of 15 of those hours and studies, charitably, two hours for each hour in class, 45 hours in total are given over to academics. Take another 50 hours out for sleeping and eating and we are left with 70 hours unaccounted for by the basics of college. How do students make use of this time? Most, it seems, work. Yet, we are very unlikely to have much data on just who, where, how and what students do when they work, let alone information about how their work affects performance in the classroom. If there is a link between education and work, it is a tenuous one established more on the basis of myth and folklore than on any direct evidence. Indirect evidence is not reassuring. Harper's Index, for example, informs us that one of every 15 Americans now working has worked at McDonald's, the sort of workplace where employees are eligible for a bonus if they manage to last a month on the job. What lessons and what values are transmitted in the youth labor markets of today?

Closer to home, today's college students show a marked preference for living on campus. Residential students apparently prefer the convenience, economy and social scene of campus life -- if, at some college, they are lucky enough to find space and not be warehoused in local hotels and motels. Yet, there seems to be widespread ambivalence among college administrators as to just what responsibilities they should take toward student life and behavior. Residence hall management is too often abdicated by administrators who know what is happening only when such activity threatens to bring unwanted outside attention. In charge are student personnel officials who, in turn, delegate day-to-day management to Resident Assistants. As an ex-RA, I attest to the 24-hour-a-day character of a vastly underrated, underpaid and difficult job -- finding light bulbs at four a.m, birth-control counseling, cleaning up vomit in the lounge, settling family-like disputes in the co-ed dorm. RAs typically are only a few years the senior of their charges but, in many respects, they are the life-blood of the residential college. They are the priests and police who keep students attending to their studies, to their work, to their friends and, in extreme cases, to their lives. I daresay, however, that few college professors, deans, institutional researchers or presidents could identify a single RA on their campus by name.

I do not wish to bypass other variations of student life outside the classroom. The Greek system is back with us again, and again there is evidence of its smug, standoffish, selfish character -- a concern even if only three percent of all college students belong to Greek societies. Commuters are still, at best, marginal and almost invisible participants on many college campuses; if dropout rates are our guide, they remain an endangered species. Enrollments for ethnic and racial minorities are down in most schools, and those that remain have the predictably difficult time the numerically few and different have amongst the numerically many and similar.

This breathless list of issues from the natives' point of view is not intended to accomplish much more than remind us what it might be like to be a student these seemingly placid days. I've picked a few areas of troubling concern because they happen to be favorites of mine. I haven't even mentioned an issue that crowds the pages of our new magazines -- the "you-pick-em" supermarket approach to course design and selection that often leaves students befuddled. One of my undergraduate advisees captured this nicely a few years ago by asking quite seriously, "Do I really have to take what I want again next term?"

In sum, it appears that for many students who manage to get over the hump of college choice and entry, college life boils down to spending four or more years in a youth ghetto, scrambling for grades in courses of uneven quality and unfathomable sequence, socialized primarily by peers on a cultural island that is rarely visited by non-natives. Too strong? Perhaps. I'm not here, however, to soothe or calm the waters, but rather to stir them up a little bit.

We come now to my sermon and a few cautionary notes. I'd like to see institutional research rediscover something of its heritage. Pointedly, I'd like to see institutional research concerned less with managerial than with student and educational matters. I don't believe college is, at heart, merely a business to be managed calculatedly with some cold, bottom-line or rate-of-return in mind. To be sure, there is a political economy in which we must all somehow swim and survive. Plans, forecasts, market studies, systems analyses, wage surveys, and estimation procedures must therefore play a part. But there is much more to whisper in the ear of college administrators than the results of the latest nose-count calculus.

In particular, we need some indication of what happens to our students during their college years beyond the fact that many of them persist in completing 128 credit hours and gaining a degree. I submit that we don't know very much about student life and culture on our own campus because we don't try very hard to learn. Inputs and outputs are thought to be what counts; hence, they are what we measure. We probably know far more about our students before they enter and after they leave than we do while they are with us. I think this short-sighted, for if we are to manage education better it is with the process of education itself that we must begin.

The educational process is not captured well by frequencies or statistical summaries. Process entails experience, and experience is best captured by narrative. Descriptions of student lives-in-progress are required. On this matter, institutional research, broadly defined, has had considerable past glory. Ted Newcomb, Howard Becker, Edgar Schein, David Riesman and Burton Clark, to name a few, have all pointed to the distinctive, yet varied, mix of cultures conveyed by colleges. A favorite example of mine is Ben Snyder, who, in the mid-60s, carried out a marvelous little study through the Division of Institutional Research at MIT. He added the phrase, "The Hidden Curriculum," to our vocabulary

while provoking some much-needed change in the way student cultures were treated at the Institute (Snyder, 1971).

What makes the work of these people outstanding examples of institutional research is its ethnographic or descriptive character and the serious effort to portray college life from the student's perspective. In these competitive times of cost consciousness and outcome obsessions, students tend to get lost in the shuffle. A sophisticated office of institutional research, however, has to think holistically about college life. It must think qualitatively as well as quantitatively, about culture as well as structure, in the language of students as well as the language of managers.

There are no obvious reasons why simple, open, descriptive studies of various student groups cannot be developed and distributed such that the pressing and sometimes urgent views of these groups can be heard. We lack, not the skill, but the will to do such work. Straightforward ethnographic work of the sort I have in mind requires only a target group to talk to and some paper and pencil to record what is learned. This is not a high-tech activity. High-powered analytic models do little more than get in the way. Our students are hardly shy, wily natives intent on keeping the anthropologist out of the village. They are more than pleased to speak on matters of personal concern. I have in mind, of course, more than a take-a-student-to-lunch program. What is needed is a systematic, on-going, pulse-taking activity designed to describe, not prescribe, student concerns and activities. To twist a phrase, there is nothing so practical as a good story.

Ethnographies, be they native, professional or amateur, are what I wish to encourage. Glimpses into the odd corners of our institutions are not only matters of intrinsic interest but are often sparks for creative problem solving and further inquiry. What are our typical campus visits like? How is life lived in Bill-Jim Hall? What happens during a day in the life of an Hispanic freshman on a lily-white campus? These are not statistical questions, but questions of value and meaning. Such mundane imponderabilia are the stuff of which college life consists. Without some knowledge of the student culture, we surely lose sight of what college is about. I have no illusions, of course, of a science of ethnography. It is an art, a craft, but no less an art or craft than some of the highly-rationalized, yet narrow, analytic models we spend so much time developing and fine-tuning.

In brief, so much of what passes for information collected and processed by a university about itself is rather empty of meaning because it possesses few obvious connections to everyday life on campus. To be sure, this is an age-old criticism; but with the astonishing increase in our ability to slice and dice information with our handy-dandy, desk-top computers, we may lose sight of what it all means. I am asking simply that student cultures be taken seriously and that we make an effort, however partial and primitive, to sketch out some of the concerns of the students who justify our presence on the college campus.

Of course, such work requires mobility. Cultural inquiry takes place on the ground where the objects of our affection are found. It requires listening to and learning from students going about their daily affairs. It might mean (shudder) taking in a class or two; hanging out at the student center for more time than it takes to wolf down a burger; or (gasp) visiting a dorm on a Saturday night. Tactics are multiple. Surveys, diary methods, intensive interviews, focus groups, archival searches, bull sessions in the halls and quads all are possibilities. A tactic might be borrowed from anthropologists who make use of spot-reports from native informants. A good deal of ethnography goes on as

classroom assignments in many social science, education, and management courses; this work could easily be tapped. If we really want to get a better feel for what our institutions are doing to and for the inmates, we have many ways of generating the kind of narrative data we need.

That we seldom do so suggests a final and perhaps gloomy point. Maybe we don't really want this information. Maybe if we had it we wouldn't know what to do with it. The history of organizational self-reflection of the sort I've just mentioned is, after all, not all that splendid or common. There are several reasons that bear elaboration.

Educational evaluation, as a field, was captured early by psychology and more recently by various forms of economic analysis. This is not accidental. Both areas represent the most "scientific" of our social research disciplines. From psychology, we receive our testing mentality; the science of what is in people's heads comes complete with a technology for how to unload such knowledge. From economics, we receive our various input-output models and the proverbial black-box or invisible hand that transforms one to the other. As a result, both disciplines present us with a never-ending stream of discoveries for how best to do X, Y or Z.

The problem, of course, is the speed with which each discovery is replaced by another contradictory discovery. Large classes are in, then out, then in. Zero-based budgeting comes and goes. Forecasting or cost-containment models are adopted and discarded like Cabbage-Patch dolls. According to Howard Becker (1983, p. 99), it is all a little like child development, a "science" whose experts, on the basis of good evidence, advise everyone in alternative decades to feed their babies on schedule or on demand.

Why do we accept the authority of such patently problematic disciplines? It seems to me that one reason has to do with our need to offer proof that our educational plants are operating fairly, efficiently, and productively. Our swoon into the arms of quantitative, scientific, so-called objective techniques coincides with the broad democratization of higher education, the standardization and routinization of education, and its increased competitive character. Time doesn't permit lengthy elaboration, but, in a nutshell, I suspect the fundamental point is that we promise more than we can deliver -- "to fulfill and transform." In the face of being called to task for our shortcomings, we seek to convince skeptics, friends, enemies, legislators, parents, boards, alumni, students and, indeed, even ourselves that our institutions are nonetheless being run on rational and defensible grounds. Enter, here, the neutral, fair, beige, scientific, quantitative, and objective planning and evaluating techniques as culturally-approved means for providing legitimation and justification for what we do. It is form over substance.

In contrast, subjectivity, sensitivity and judgment are the keys to the kind of assessment techniques I have in mind for institutional researchers. Alas, these methods run afoul of the legitimation and justification functions served by our present research techniques because they so often spoil our pat explanations for why we sometimes fail -- explanations that frequently turn on the alleged inadequacies of the students (psychology) or the marketplace (economics). Avoidance of ethnographic research is not direct (or venal) in the sense that administrators are saying that such research will let the cat out of the bag, but there is, I think, an undeniable element of subterfuge in much of the research accomplished under the institutional flag. This is at least part of the reason we uphold our "scientific techniques" with such zeal and why ethnographic, close to the ground, methods are so disliked.

The other part may well be more immediate and self-preservational. If we study our institutions from the ground up (or "inside-out"), we will eventually wind up studying everybody, including ourselves. One of the lessons learned from some of the exemplary works I mentioned before is that student cultures are shaped by a wide array of decisions and non-decisions taken well beyond their borders. If we sniff around a student dorm, for instance, and discover that the faculty have not been seen since the Peloponnesian Wars, the faculty may well become targets for criticism. One of the surprises ethnographies hold in store for people is that all groups on campus are fair game for study. Moreover, members of these groups know well that if people hang around long enough studying what they do all day, sooner or later they will find out things the people studied would prefer not to reveal. Ethnographers invariably discover such things. Their work is therefore profoundly evaluative, no matter how it is sold or explained. Their study of student cultures necessarily spins upward, and while administrators may not mind studies that point to a few troublesome products, they will have great difficulty with studies that suggest it is the production process itself that is to blame.

Finally, two rather vexing utilization or implementation problems are associated with my call for narrative, qualitative research. Both surfaced during the brief heyday of field studies in higher education, the 1960s, when great hope was placed on the "depth" of ethnographic research and its unarguable closeness to the facts of college life. Both are as relevant today as they were then.

First, administrators are rightly concerned with running a tight ship and maintaining a proper image of their institution. They will have problems with research that stumbles on drug deals in Founder's Hall, program directors using funds allocated for program innovation to cover operating expenses, or faculty who respond to publication and tenure pressures by simply vanishing from campus for weeks at a time to write at home in the privacy of their studies. Administrators want to know who these people are and what they can do to put an end to such shenanigans. Researchers know, however, that if they go around informing on people, there will be no people left to study. Perhaps a greater sophistication surrounding these issues now exists than in the past, but the issue remains a real one. Privacy, confidentiality, and a rigorous refusal to scapegoat individuals for institutional failures are absolute, moral requirements for the kind of work I am shamelessly pushing. Unfortunately, this stance does little to enhance the status of ethnographic work in the eyes of administrators.

Second, although ethnographic, judgmental, student-oriented research is inherently problem-focused, the solutions researchers propose may not be the ones preferred by decision-makers. Often, our solutions are not seen as "practical." Typically, the problems dug up in ethnographic work are fundamental ones and quite resistant to a so-called quick fix. Here is an example. I once produced a draft of a study I conducted on my own institution, the Sloan School (Van Maanen, 1983). The faculty and administrators who read it -- by and large, only the most concerned and serious of my colleagues -- wanted me to make recommendations. For instance, in the report I described (apparently convincingly) how first-year master's students formed tight little conforming, risk-averse groups on the basis of being marched through coursework at the same speed, in the same order, with the same cohorts, and presented with precisely the same material. The result, since the students were put in the same boat by the faculty and administration, was that individuals wound up doing things together -- including homework, tests, term papers, and the like. That possibility appalled the faculty. I explained, however, that the batch-processing model promoted such a response and if they wanted something different, they could allow students more choice of when, where, and with whom they could take their courses.

My colleagues at this point were not pleased. What was the problem? My solution, the program head said, would destroy the ease and economy the current scheduling strategy produced. It would be hard to track students and make sure they were fulfilling their requirements on time if we moved away from the block model. Faculty would surely complain because classes would become less standardized and students would be able to make more comparisons among them as to who was teaching well and who was not. My solution might work but, alas, it wasn't very practical or realistic.

This, of course, is a fundamental problem. What the institutional researcher identifies as a cause when working from my ethnographic model may well be something people can't or won't do anything about. Good social research, it seems, always makes some people uneasy if not angry. But more optimistically, only work that seriously attempts to get close to its subject matter, student cultures or anything else, produces the sorts of answers that are worth having--in the long run the only kind of answers that will work. If we are to manage education better by attending to student life, institutional researchers, like field workers in sociology or anthropology, must learn to live with the critic's curse: the slightly marginal status that comes from doing good, reputable work that is viewed by the power holders as somewhat suspicious and dangerous.

As long as colleges keep running into failure (and the converse is unimaginable), we must put the pressure on and force decision-makers to look at what they might otherwise prefer not to see. Being members of the very organizations we study helps in this regard, for our loyalties can be assumed to flow in the right direction. To live and work at a college or university is, as I said at the outset, a most attractive, self-enhancing and worthy situation. To help manage these institutions and try to make them better is a never-ending, noble, and downright enchanting task.

References

Becker, Howard S. "Studying Urban Schools." Anthropology and Education Quarterly, Vol. 14 (Summer 1983), pp. 98-108.

Boyer, Ernest L. College: The Undergraduate Experience in America. New York: Harper & Row, 1987.

Fussell, Paul. Class. New York: Summit Books, 1983.

Snyder, Benson R. The Hidden Curriculum. Cambridge: The M.I.T. Press, 1971.

Van Maanen, John. "Golden Passports: Managerial Socialization and Graduate Education," The Review of Higher Education, Vol. 6, No. 1 (1983), pp. 435-455.

EXECUTIVE LEADERSHIP: THE PROS AND THE CONS

(general session)

Brunetta Reid Wolfman, President
Roxbury Community College

Burton I. Wolfman
Higher Education Financial Consultant

(This is an edited record of an address presented in the Count Basie Ballroom of the Vista International Hotel, Kansas City, Mo., on Monday morning, May 4, 1987.)

The conference planning committee assigned this topic to us in true institutional research style: they were clairvoyant (in professional terms, attuned to forecasting), terribly trendy (translated to "relevant"), and perhaps diagnostic of prevailing societal anxiety. The Washington-Iran-Contra crisis and the Tower Commission report focused national attention on managerial style and its consequences as we saw the divergent styles of President Reagan and Chief of Staff Regan play against the implicit accountability standards of electoral politics. The Washington scandal illustrates not only the problems of managing effective policy, but also the consequences of loose organizational control. It reflects the ways in which managerial styles interact and can come into conflict. In this discussion, we try to convey our views of the effective manager/leader in higher education.

The Chief of Staff Regan model demonstrates the fallacy of the generic manager whose skills, style, personal attributes, and concepts of the prerogatives of office transcend the organization and its inherent value system. The generic model is that of the corporate world as it has evolved from the scientific management of Frederick Taylor and successive generations of analysts adapting it to modern terms. It has been argued that the corporate/industrial managerial model could be applied to all large-scale service delivery systems since they are all concerned with control of scarce resources, financial and human, and with developing communication systems, formulating policy, and defining criteria for accountability. However, the imposition of the corporate model on higher education results in an imperfect fit because of the diversity of our institutions and the multiplicity of conflicting goals within them. We are not an industry, but a complex of service and certification systems.

The only commonality which cuts across the educational system is the responsibility for the transmission of knowledge (to borrow a term from program budgeting) through a defined curriculum and a faculty. Are educational institutions managed and, if so, are they managed by the president? Certainly, there are people who exercise fiduciary control, regulate the appointment, progression and termination of staff, enter into contracts for services and goods, solicit and accept gifts and/or appropriations, matriculate and grade students, and certify their completion of programs. People doing these tasks administer or manage the activities. Does the collegiate president manage the tasks, the managers, or both? Are the requirements for leadership the same in educational settings as in the for-profit sector, where the CEO must take risks, define products and markets, and be accountable for those decisions? There are many similarities between the tasks

and duties of the corporate CEO and the academic executive leader. There are also profound and substantive differences in their respective claims to authority to deal with control, uncertainty and future planning. Should we become comfortable with the corporate leadership model in an academic setting? We argue that the corporate model is inappropriate and at best is a forced fit for an educational setting. We also argue that its use distorts and clouds the analysis of the educational executive leader.

The fact that higher education has different and distinct organizational settings, e.g., two-year, four-year and university, perhaps is not markedly different from the diversity of industrial centers which organize resources for production. More to the point, it is the sponsorship and funding of higher education which makes the educational system virtually unique in the world of complex organizations. In addition, the governing structures defining the relationship among faculty, students and staff guarantee a complex system unlike any other. If we can accept this concept of uniqueness, then we must also accept that the criteria for management, or more precisely leadership, must be different in style, preparation and implementation. Before saying more about these issues, it might be helpful to look briefly at the relationship of funding sources and governance and their impact on leadership.

Publicly-sponsored institutions, dependent on an annual appropriation, implicity and sometimes explicity include in the governance equation the Governor, the legislature, a statewide coordinating or regential board and institutional trustees. While the institutional board may have statutorially delegated authority to govern, the influence of the public -- especially on those who are elected -- cannot be far from the members' consciousness. To the extent that students, staff, faculty and alumni are politically active in electoral politics, they also have a significant voice in the determination of governance issues and priorities, all of which have direct bearing upon executive leadership. The funding imperative is the spector which haunts the college president.

In the independent sector, where funding is more dependent upon tuition, voluntary contributions from alumni, institutional friends, corporations and/or special governmental grants, the governing board itself sets institutional parameters but is influenced by its dependence on funding sources. These sources can provide opportunities for greater autonomy and flexibility but are also inherently more uncertain. One could argue, in this context, that the most autonomous institutional executive would be the one who presides over a totally tuition-driven institution (not unlike the corporate CEO with one product line).

Certainly resource acquisition either from the legislature (in the public sector), alumni and/or corporations (in the independent sector) leads the list of external factors dictating to the presidency. Internally, faculty participation in governance is another critical component that varies substantially among institutions, depending on collective bargaining agreements and teaching or research missions. Student satisfaction or unrest can also influence the choices of the president. Insuring enrollment is probably the universal driving force in all educational settings.

Another significant difference between the corporation and higher education is the latter's focus on the developmental needs and goals of people -- indeed, today, on people at all stages of the life cycle. The contemporary college may have educational programs for toddlers, young adults and the elderly. Learning is presumed to take place in many settings, in and outside the classroom. The culture of the system centers on the development of human potential, implemented by the transmission of knowledge, the preservation of knowledge and the creation

of new knowledge. The leader of such an enterprise must be a more complex leader than in any earlier era of higher education.

Inherent in the culture of higher education is ambiguity about definitions, roles, responsibilities and futures; lack of certainty traditionally is associated with scholarly settings and lives. The tugs between the past, present and future are always apparent and provide some of the excitement in an academic setting. Different constituencies -- students, faculty, alumni and board-- often hold vastly different criteria for the chief executive. Given the confused and complicated setting, how does one begin to develop a prototype of an effective educational manager/leader?

Let's start with the past, the traditions. Our institutions are not all covered with ivy and moss; most are raw concrete or brick, but they emulate centuries of tradition in patterns of thought and behavior. There is a need to create a tie to the past, a link in the chain of academic continuity that may only be glimpsed annually at commencement. A president chosen to provide continuity with the past may be an alumnus or a product of an esteemed, ancient college who will bring high culture and reflected glory to the campus. Such a president may be a means for the college to increase its prestige and self-esteem. A president with a clear tie to tradition may represent standards of excellence toward which the institution strives, and these standards may be a source of contention between constituencies. Or, the president may be chosen to revive lost traditions at the college, another possible source of friction; the choice may represent an episode in a continuing internecine struggle, the ascendancy of one faction over another.

There are many instances when the traditional president comes with a clear sense of being one of the select few, anointed with a divine right to rule. Signs of imperial majesty will begin to appear and will reassure many that the president has "real class" and the campus will benefit from the new elegance. However, most boards -- particularly those in the public sector -- do not take well to displays of affluence and majesty. The regal CEO may not be a person who believes in working in a collegial fashion and uses the hierarchical model of the medieval monastery or the structure of the laboratory research group. This may be a style favored by a board which wants to set things right and return to the "good old days" because the place needs "shaping up." All boards, private and public, have a hard time dealing with presiding monarchs who, like the Red Queen in Alice in Wonderland, often have as a favorite refrain: "Off with his head."

Another return to the good old days may be the selection of the "robber baron" president, the entrepreneurial, acquisitive manager. A board may select this president because its members are terrified by the threat of declining enrollment, loss of income, or a diminished sense of mission. He/she is chosen to give the institution a charge, a direction, a competitive edge. Studies may be commissioned which indicate the strategic advantages of moving in one direction or the next, beginning one program or dropping another, using "celebrity" adjuncts, advertising or moving into new territories which are unserved by any other higher education institution. In addition, the robber baron president must cultivate new donors and patrons who will provide scholarships, endowed chairs and discretionary money for honoring his/her geographical area or commercial area. The cut-throat entrepreneur will not cooperate with other institutions. He/she is interested only in the bottom line (more student enrollments) and the market forces which are dictating new programs. He/she will also run roughshod over faculty who want to use the time-honored methods of shaping and instituting academic programs. Some faculty will be casualties in the process: they will not survive the wars in which the baron president has greater fire power and resources, plus the merit and tenure of authorization.

Another traditional president is the conservator of the faith, be it religious, gender or racial. The president must be one of the group and have the experience and feeling to understand the importance of survival. We can look around and see evidences in the institutions created by the various religious and racial/ethnic groups, and in single-sex colleges. They all came out of the struggles of their group to become a part of American society without losing identity. These institutions are needed still because they preserve a sense of self and succeed only if they understand their heritage and their tradition in this country. The 1980s are not an easy period for single sex, historically Black or sectarian colleges, because the forces committed to wiping out differences in the interest of the majority are using the force of public opinion, the courts and administrative judgments to destroy this distinctive aspect of American higher education.

The president who may be selected to be the chief conservator plays a very important role as spokesperson of the particular group and major interpreter of the community. The president of a women's college must be able to articulate the value of that institution, the reasons that it is not an anachronism. The same is true of the president of the historically Black college. The conservator president often becomes a national advocate for his/her group and a reminder that the diversity of American higher education is fragile.

We have other kinds of presidents who are very much with us. There is the wonderful "day by day" presidential manager. He/she is terribly relaxed, a great source of comfort and even fun, because there are no crises which cannot be handled. Personnel problems, budget crises, enrollment shortfalls are all things which can be overcome in a relatively calm manner, or they will wait until tomorrow. The "que sera" president is a calming influence on disputing factions and is able to pull all factions together whenever there is an attack from hostile forces from the outside. In fact, this style merges into the crisis-manager president who is immobilized until there is clear and present danger. This style is among the most common at the present time, when the expectations for leadership are rather low.

The crisis manager was in fullest glory in the late 1960s and early 1970s, a time for student, faculty and administrative tests of strength. He/she did not anticipate disruptions or problems until the police had to be called or the institution was not functioning. Today's crises may be caused by a racial confrontation, a tenure decision, an increase in tuition, changing the rules for any aspect of campus life -- or by a season of the year which encourages volatility. All of us carry in our hearts a secret dread of spring. The crisis-manager president has the capacity to arouse more activity and passion on the part of the staff than one might imagine possible if one looked only at the normal lethargy.

In the real world, there are no clear distinctions among these styles, and elements of each may be found in one president. It is also probable that institutions need leadership akin to one or another of these types at different times in their history. Probably any college would be worn to a frazzle if subjected to decades of the same tenor of leadership. Most institutions seek situational leadership which accommodates to the student and faculty profiles and the inner demands of a particular time. This is somewhat different from defining situational leadership as a response to a given context; we propose that the context defines the kind of leader who is needed. The situational leader often is a person who arises out of the group, one who understands and can articulate the very heart and soul of the institution, represent different factions and forge consensus about the present and the future. The situational leader is more likely to be found in a peer-driven academic department or self-contained unit than in the larger institution. A situational campus leader may emerge for a

brief period when there is social fervor and turmoil, but he/she is unlikely to adapt to a more bureaucratic mode of leadership when the crisis subsides.

Since the great educational upheavals of the 1960s, all of our institutions have been forced to incorporate into institutional procedures the requirements of affirmative action, consultation with constituents and, often, the conditions of collective agreements. As a recent Association of Governing Board study directed by Clark Kerr notes, many of the most able candidates withdraw from presidential searches because of the public notoriety of the process. Moreover, many searches begin with incomplete agreement about the job description of the executive and the future desired for the institution. The essential nature of the selection process <u>should</u> be an attempt to define the future and identify the individual who will lead the institution to achieve the agreed-upon goals. Too often, it is symbols of the office and stereotypes of the executive personality that prevail rather than a vision of the future.

Since the end of the World War II and the concurrent dramatic impetus for the growth of higher education, we have experienced rapid growth, accelerated research and scholarship, a backlash caused by alienation to impersonal settings, demands for inclusion, scarcity of fiscal resources and now a scarcity of human resources and clients. During the growth years, the president was required to be the advocate for growth: more buildings, more faculty, more programs; the demand for educational services needed to be met. The less government interference, the better, because red tape delayed implementation of growth. During the years of revolt and backlash, the president was required to be "cool," fend off critics from all directions, protect his or her board and then get out before too many negative decisions created too many enemies to survive in office. The president of today must manage scarcity. For a period of time, when financial resources were becoming scarce, there were those who argued that cost analysis and related corporate strategies were needed to govern and manage our institutions. Such tools were helpful and they remain a part of the culture of our institutions; however, they are not enough. Presiding over scarcity requires, not more cost effectiveness or greater efficiency, but rather a clearer understanding of future human needs. It is the loyalty of an institution's clients which will determine its ability to survive.

The CEO of an institution of higher education, regardless of gender, racial origin or religion, is the self-fulfilling prophecy of the institution, the product of the dynamic which produced his/her appointment. The quality of leadership, the president's intellect and managerial skill arise from implicit and explicit mandates of the search process. All too often when a Board begins the search for a new executive/leader, it has before it a well-defined list of grievances attributed to the prior executive. Whether these grievances can be substantiated or not, those aggrieved are usually included in the search process in the hope of obtaining institutional consensus. In many instances, because of this faulty pursuit of consensus, the search process starts from a base of mediocrity from which it may not be able to recover. Strong candidates know that they cannot be all things to all people.

The Board and the search process, at their best, can articulate the goals of the institution and the milestones -- capital campaigns, new degrees, etc.-- immediately ahead. The search committee then evaluates the candidate pool on the basis of skills, styles, past experiences and ability to articulate a vision. We would argue that the search process which is too heavily guided by the frustrations of the past is doomed to produce transitory presidents. The transitory nature of the presidency is often masked by a "code of the club" which says long tenure is impossible because of external factors, or the internal demands are too

great. The problem may rather be inadequacies in initial job description and the search process. Head hunters, in some instances, are able to force a board to articulate its needs in a more objective and strategic fashion. We have all heard that most people who profess to wanting to be presidents are wrong for the job, that frequently the "best" candidate does not seek the position. If we believe that the context defines leadership, then the position should seek the candidate.

What is needed? We argue, based on our experience and understanding of the higher education system, that there are two fundamentally successful presidential models, the Entrepreneur and the Prime Minister. Although the titles suggest references to business and politics, we will place them in the setting of higher education.

If an institution, public or private, is tuition-driven, there is no avoiding the bottom line, enrollment figures. The executive in this setting must be able to manage or direct resources, human and fiscal, to meeting enrollment targets. He/she should either be skilled in the art of consensus or be skillfully autocratic so that staff morale does not negatively affect the primary goal of enrollment. The Board in this type of institution tends to delegate to the executive. Faculty may abdicate any leadership potential since all efforts are directed toward the effective management of tuition resources.

Increasingly, however, the Entrepreneur cannot rely on tuition revenues to support the institution and must seek additional funding from alumni, corporations, governmental sponsors and individual patrons. The entrepreneurial president must be able to sell the mission and products of the college to the potential backers. This is unlike the role of the corporate CEO, who may have been in sales early in his/her career but is not required to continue the role as the head of the organization. The growth of endowment, new buildings with donor names on them, scholarships are tangible evidence of the success of the president's efforts.

To the extent that the Entrepreneur can bring new resources to the institution, he/she can dispense rewards to individuals and units which have displayed loyalty and dedication to the president's objectives. A new type of patronage system may evolve to reinforce the direction of the leader, but this need not result in poor educational quality. On the contrary, if the Entrepreneur succeeds in obtaining surplus resources, the quality of the institution will increase. It is institutions caught with inadequate resources, a confused sense of mission and unfocused leadership which run the risk of poor educational quality.

As long as the Entrepreneur has a vision for the institution and is able to bring resources to meet the needs, he/she will be able to lead. If for any reason, the leader loses the vision or interest, he/she will probably be replaced.

This president is the spokesperson for the reigning majority, the dominant faction in the institution; he/she represents and is able to articulate the interests of what is likely to be a coalition of diverse constituencies: faculty, students, alumni, legislators and/or trustees. Leadership and consensus-building are the most apparent skills of this type of president, along with a visionary grasp of the institution, the external environment and the future. Charismatic force which will help provide the momentum for the institution to marshal the human and fiscal resources to sustain itself. Often, the constant and continuing flow of resources are dependent on the clarity of the mission, the constancy of the implementation of that mission, the degree of inclusiveness of the constituents and the loyalty of those constituents.

The Prime Minister is best able to speak for the future if there is a legacy shared by the constituents of the institution; he/she is able to capture dreams, aspirations, and shared memories, and can communicate these aspects of the institution's culture to the larger world.

This type of leader primarily delegates management to important line officers: Administration/Finance, Academic Affairs, Development, Student Affairs, Legal Counsel. The critical managerial task for the Prime Minister is to hold the line officers accountable and to get them to work together. It is helpful if the Prime Minister has analytical skills to assist in the evaluative tasks of the institution and anticipate and plan for decision-making. It is the Prime Minister who has to help resolve conflicts, prevent any rents in the consensus fabric and keep the coalition moving forward. Since his/her essential power is shared, decisions are seldom arbitrary, made in haste or isolation. The Prime Minister must also be a resident critic of the coalition, because a failure to be critical of existing practice makes the Prime Minister and the coalition vulnerable to external attacks and internal erosion of confidence. The criticism, However, has to lead to corrective actions based on collective solutions.

The Prime Minister should be able to chart a new course and to lead the coalition to new levels of participation and institutional understanding. It is this leadership which will justify the acquisition of new and additional resources, the development of new knowledge, the changes in administrative configurations and academics. The Prime Minister will inspire and encourage others to analyze and dream and implement the dreams, thus contributing to the coalition's growth and progress.

The Entrepreneur and the Prime Minister share a primary motivation and great asset; they are institution builders. They may represent extremes of style, particularly with respect to management and uses of information, but their drive and success are measured by institutional growth and development. This does not necessarily mean that there must be physical growth; but the impulse toward excellence is an indicator of growth, perhaps more important than new buildings. There will be indicators of vitality and excitement, involvement of staff, commitment of various constituents to achieve the goals articulated by the leaders. The Entrepreneurs and the Prime Ministers are the real "PROS" which make higher education a distinctive, vital contributor to the American society. They are the givers, the sharers, the nurturers, the builders.

The "CONS" are those presidents who allow their personal style, weaknesses, and personal aspirations to be the focus of the institution's activities. It is this group which detracts from growth, because they are the takers, caught up in personal ambitions to the detriment of those around them and the institution. They leave a legacy of few accomplishments and bitterness.

In light of these styles, what is the role of institutional research? In the early years of your craft you were the number crunchers, the nose counters, the definers of square feet of building space and classroom utilization. With the advent of computers, you were elevated to analysts, systems and otherwise. As scarcity became a factor, you became forecasters and planners of all sorts of trends, some empirical and some impressionistic -- and on occasion even divine! As institutional management weathers successive crises, institutional research gains in legitimacy and moves closer to the source of power and decision-making. You have become translators of some parts of the past and soothsayers of the future -- a remarkable synthesis if one considers that you are barely a recognized profession, let alone a science! In all seriousness, you have become a part of the institution-building resource. It is institution-building that is

the key and link to the presidency of the institution. You provide the information needed by management to build institutions. The president who uses your information for building enhances your role. If the leader is not a builder, your information has only marginal utility.

Your commitment, then, is to professional activity which contributes to institution building, because it is by strengthening the diversity of the American higher education system, by expanding the capacity to address the needs of our people, and by preparing competent, educated citizens that we who work in higher education will ensure that the legacy of the past is fulfilled in the future.

INFORMATION TECHNOLOGY: USING IT IN RELEVANT WAYS
(general session)

Christine V. Bullen, Assistant Director
Center for Information Systems Research
Sloan School of Management
Massachusetts Institute of Technology

(This is an edited record of an address presented in the Count Basie Ballroom of the Vista International Hotel, Kansas City, Mo., on Tuesday morning, May 5, 1987.)

Recent History

The most familiar way of looking at the history of information technology is to look at the changes in the technology itself. In the early days of computing the only technology available was the mainframe computer. At different points in time, the size and capability (not to mention price!) of mainframe computers differed enormously. The earliest mainframes were huge in size (occupying entire floors of buildings), less powerful than today's small personal computers, and so costly that they were found only in research laboratories. As computers became available commercially, size decreased, power increased and cost was dictated by the market. Until the late sixties, the major technology changes in computing hardware can be described as simply increasing the "bang per buck" -- i.e. delivering more power for less cost to the customer.

The first revolutionary event in this short history was the development of the minicomputer. Compared to today's standard of a personal computer, a minicomputer is still a large, mainframe-type computer. However for the data processing departments of the sixties and seventies, the concept of a computer that could operate independently of the mainframe and have the horsepower to do something useful was mind-boggling. It was also threatening. One of the problems with focusing on technological change as one traces the history of information technology (IT) is that one tends to overlook the social, political and environmental changes that were also taking place.

It is useful to think of the evolution of IT in terms of two paths: 1) the technological path itself, and 2) the path which describes how the technology was being used. The days of the large, expensive mainframe computers coincide with the days of using computers as number crunchers. Early data processing professionals understood how computers could be used for tracking accounting data and carrying out jobs that involved well-structured, repetitive tasks. Because of the costs of these large beasts, data processing was assumed to be a corporate-wide function and the computer tool was, therefore, applied only to corporate-wide tasks.

Some of these notions began to change as the concept of time-sharing developed. It was discovered that since the computer's ability to perform operations was much faster than a human's ability, it was possible to have the computer perform operations for many people at the same time, without any one user's work suffering. This time sharing concept was enriched to the point of providing computing services to users outside of the traditional data processing community,

e.g. to scientists and engineers who needed computing power for their projects. This was the first step in the truly dramatic change that is still evolving today: end-user computing.

That technological change must go hand-in-hand with use change is obvious. However, innovation research has shown that, by far, the majority of innovations in the use of equipment (whether we are talking about farm equipment, or information technology) come from the users themselves. Innovation is not, as is often pictured, simply the result of some brilliant inventors creating behind closed doors. The more the users outside the traditional data processing departments found ways to employ the computing tool, the more pressure there was to bring the computing power to them in the most efficient and effective ways. These, then, are the events which led to the development of the personal computer.

The sixties and seventies saw ideas about "management information" begin to blossom. The first concepts were very primitive, consisting entirely of aggregations of data that could be drawn from the masses of accounting numbers being tracked by the mainframe computers. Grandiose plans for "management information systems" based on this approach failed miserably and in so doing caused the disillusionment of many practicing managers. Here is the origin of unpleasant terms like "management misinformation systems," and the origin of total mistrust of data processing organizations -- their projects were always over budget, late, and never succeeded in performing as planned. It became general knowledge that the only thing computers were good for was number crunching in large, highly structured tasks.

Fortunately, there were a few researchers and enlightened DP professionals who pursued the ideas of designing information systems to suit managerial needs as opposed to looking at the data available in the accounting systems and trying to force-fit management reports. This work actually took two distinct directions. One was pursued primarily in the academic world and consisted of designing systems that assisted users in carrying out their tasks. Since many of these tasks involved gathering data on a particular situation and then coming to a decision based on that data, these systems were termed Decision Support Systems (DSS).

One aspect of DSS that was quite different in philosophy from previous system design was that the system ASSISTED, i.e. supported the user by performing time-consuming, structured activities that resulted in information which the user then considered and upon which the user made decisions. Neither the system alone, nor the user alone, was as powerful as the combination. Previously, many systems were designed to REPLACE the human, e.g. check-writing systems. Traditionally, DSS involved the user actually manipulating a computer (generally through a keyboard) to perform operations ranging from searching data to building models. In the early days, DSS were built on timeshared mainframes. An early DSS requirement -- no longer required -- was that the system include modeling.

The other design approach, pursued primarily in the business environment, was to understand what information managers needed and provide that information in the form of printed reports. This was an improvement over the simple aggregation approach; however, this too encountered many problems. The task of understanding what information managers needed and how they used the information available to them was, and is, an extremely difficult and complex task. In effect, the problem was how to design relevant information systems. This is still the challenge today.

What is Relevance ?

Support vs. Replace. There have always been different schools of thought about how to make computer-based information relevant. One way of looking at this is to divide the approaches into two, differentiated by the key philosophical point of support versus replace.

Since the first use of computers was based on the notion of replacing humans or substituting computing power for human power, this approach has always been a powerful one -- one pursued by many in the field. The first large mainframes took over repetitious, time-consuming, structured tasks. Even with the advent of the notions associated with DSS, the computing power was being used to replace human time in the structured tasks of searching data and performing calculations.

In today's most advanced technology, one can still see this approach in the design of expert systems and in the study of artificial intelligence. Expert systems are an attempt to model totally the behavior of key experts in a field in order to REPLACE the individual with the computer. Artificial intelligence work is an attempt to build a computer that can learn to think like a person and therefore perform peoples' tasks.

Other than in the early applications of computers to structured tasks, most of these attempts to replace people have failed. Expert systems have succeeded in certain domains, e.g. medical systems, exploration systems and computer configuration systems. One of the reasons for success is that these domains involve a fair amount of structure: a patient exhibiting a certain collection of symptoms almost always has a specific medical problem. For example, the MYCIN expert system was developed at Stanford University for medical diagnosis and prescription. MYCIN associates a patient's symptoms with an appropriate list of diseases. MYCIN and other such systems then assist the medical professionals by suggesting additional tests, diagnoses and, finally, a treatment. However, in no case is a patient treated on the basis of a computer diagnosis alone. Human intervention is always present. In that sense, even these successes are not really examples of expert systems in their pure form.

Rather they are examples of expert SUPPORT systems -- the latest incarnation of decision support systems. Expert Support Systems, or ESS, use the powerful tools of expert system design, such as knowledge engineering, to closely model the performance of an expert in a particular field, but with the explicit goal, not of replacing the individual, but rather of enhancing the non-expert's ability to perform. One could certainly view ESS as a new level of understanding in the design of DSS. DSS design has traditionally attempted to create a system with tools to assist the individual. In some cases, these tools are already used by the individual, either manually or in a computerized form. In many cases, however, the designer attempts to create a new tool based on his/her understanding of the issue or task, not on the expert user's normal modus operandi. Therein lies a key difference which hints at the potential for ESS.

Designing Relevant Systems. There has always been one major stumbling block to designing relevant systems: understanding the task to be performed. By this I mean that not only the designer must understand the task, but the user must also understand the task. By far the majority of disasters in the building of information systems have been brought about by the fact that the users themselves did not fully understand the tasks or processes or their own logic in carrying out their tasks. Therefore, they could not possibly communicate the information to the designers who would need it in order to build a system to support the tasks. Another disaster scenario involved redesigning office procedures at the

same time as automating them. Under these circumstances there was little chance anyone could understand the ramifications well enough to design the information system competently. A passing comment: these disasters were almost always blamed on the information systems department and "computerization," thereby further damaging the department's reputation.

The key to this challenging problem is finding ways to understand the work to be done before embarking on information system design efforts. One approach to DSS design is called breadboarding. Breadboarding a system means coming up with a working model very quickly in the design process so that real users can try it out in real situations. This is also called evolutionary design or adaptive design. These terms refer to the notions that: 1) using a model system will help the designer and user better understand how the task can be supported, and 2) actual use of a system will cause the user to evolve and change through learning. This user growth will require parallel changes to the system. For example, a financial analyst is given a computer tool which can perform the time-consuming calculations necessary in his daily work. His usual approach involves doing a minimal number of calculations because of the time and effort involved. With the computer tool he can do more in-depth analyses, look at more alternatives, and develop models for the behavior of certain variables in his analyses. The more he uses the tools, the more tools he wants to use!

If all this sounds mushy and hard to get your arms around, then you are beginning to understand the immense difficulty of designing relevant information systems. And you can see why the traditional methods of system design which attempt to complete system specifications and obtain user "sign-offs" prior to any prototyping often fail to result in useful information systems.

Another approach involves improving the communication between the user and the designer during the initial phase of system design, called requirements analysis. The traditional methods, which date from the large accounting-oriented systems, do not get at the heart of the task or process, but instead examine the superficial aspects of the work: how forms move through the organization, which process updates which information, what signatures are required in what order, etc.

To improve the ability to understand the work, several methods have been developed by researchers, vendors and management consultants. What these methods have in common is to approach the requirements analysis step with a plan for user interviews, conducted in a language that can be understood by practicing managers, that delve into the work itself.

One of these methods was developed at the Center for Information Systems Research (CISR) at MIT and is called the Critical Success Factor (CSF) method. Briefly, this method involves asking the interviewees to identify the factors in their work that are critical to the successful accomplishment of their goals and the mission of the office. The method carefully avoids talking about computers or information systems and keeps the dialogue to a discussion of the work and the domain of the interviewee. Not only does the interviewer gain an understanding of the work, but almost always the interviewee better understands his/her work through making explicit critical factors which have often been implicit.

Once the requirements analysis has been carried out in this manner, the task of designing systems to support the individuals in accomplishing their missions can proceed and have a greater change of success.

The analogy between this approach and the expert system approach of knowledge engineering can be seen. Each interviewee is considered to be the "expert" in performing his/her job. Well-chosen questions must then be asked to capture the knowledge within the individual -- knowledge which the person has often never before made explicit. By focusing on critical success factors, the interview gets to the heart of the business rapidly.

Impacts of the Use of Information Technology

Like the use of any technology, the use of information technology can have both positive and negative impacts on an organization. The particular problem which has been associated with IT is the unexpected impacts which have occurred. Most of these have been in the area of organizational politics.

Too often the introduction of a new information system is coupled with the introduction of new procedures: "streamlining the process," reorganizing the clerical staff, changing some reporting relationships. When these new procedures threaten control or power, in a real or perceived way, the people affected fight back. This can take the form described by Peter G.W. Keen as a "counterimplementation plan"; the affected people use subtle measures to make the new procedures and systems fail. One very effective way of doing this is to provide the wrong information to the system, thereby causing the output to be useless "garbage." M. Lynne Markus reports on one case study where an information system was made to fail completely through subtle sabotage. No one could understand why it wouldn't work until an objective consultant arrived on the scene to sort out the problems.

This kind of negative impact can be avoided by a careful, sensitive analysis of the effects of implementing new systems. In some cases, there will still be negative impacts; but if they are anticipated, formal organizational change management can be undertaken to introduce the new situations in a positive light.

Fortunately, there are many positive impacts, both anticipated and unanticipated, which result from the introduction of new information technology. One major computer vendor found that a video conferencing facility, built to serve internal meeting functions, turned out to be a powerful marketing tool on the day it was used to put a client in touch with a key engineer at a remote site in a matter of minutes. No one had investigated the benefits of using the conferencing facility in this way when it had been proposed and its cost justified. This one successful sale went a long way toward paying for the facility!

Another example of unanticipated impacts can be found in the bank that implemented a decision support system to help their stock analysts model portfolios. The system was justified on its ability to perform quickly the tedious operations of getting the raw data, graphing the results and building various versions of portfolios. However, two of the most significant impacts were totally unforeseen. First, the customers who saw their analysts using the system were so impressed that they resolved to maintain their accounts there, to invest more, and to "tell their friends." Second, the analysts became so accustomed to using the DSS that they didn't want to leave the bank unless they could be assured of getting a similar system elsewhere. Clearly, there were desirable marketing and employee relations impacts in this case which were not planned.

The popular press has reported in the past that one form of information technology, office automation, will have negative impacts ranging from job tedium to illness resulting from long sessions at the keyboard. Most of the illness claims have not been substantiated. It is a fact, however, that information technology can be implemented in ways which will "deskill" workers' jobs. This is not a

result of the technology, but rather a result of how someone has implemented the technology. Any technology can be used in bad ways. It is up to management to plan the use of the technology in positive ways, and to be sensitive to any misuse and unforeseen effects.

These examples have demonstrated a variety of impacts of information technology on organizational structure and politics, organizational strategy, and productivity.

The key issue is careful planning and sensitive analysis of the information technology in the implementation plan. In addition, it is important to continue monitoring the use and success or failure of information technology after it has become operational. Often, unanticipated impacts, both positive and negative, can be managed after implementation.

The Future

What does all this tell us about the information systems of the future? Clearly there will continue to be challenging problems in both the technical and organizational arenas. Moreover, since innovation tends to emerge from actual use and users are unpredictably creative, the exact directions of information technology development are unknown.

Technical Challenges. As more people become proficient users of information technology, the demands on the information technology support systems increase. Data resource management has already been identified as a key problem area. With many users in many diverse departments seeking information from corporate "files," all the age-old problems of data definitions, accuracy, standards, and consistency take on a renewed importance. While the majority of the users have been middle-level managers, the problems have often been ignored or temporarily fixed. However, as top management and even CEOs begin to become regular users of information technology, the problems will have to be solved.

In a recent study performed by CISR, we found an increasing number of top-level managers beginning to use personal computers and terminals. In the process of providing this tool, data processing departments were discovering numerous problems in corporate data files in the areas of accuracy, consistency, and the ability of the data to be accessed. As a result, much of the information necessary to support top management's use of such a system had to be recreated through tedious re-keying of the basic data. There is clearly a limit to the amount of this sort of "patching" that can be efficiently undertaken.

The technology infrastructure to support wide-scale use must be in place. This includes communications capabilities as well as hardware and software compatibility planning. Someone needs to be responsible for managing information technology at an organization-wide level in order to solve these problems. A few years back the notion of the CIO -- Chief Information Officer -- was introduced. The concept is that, just as other resources (e.g. money) need a top management watchdog (e.g. the Chief Financial Officer), information is a major resource and needs to be managed at the top levels of the organization.

Since the advent of the personal computer, the image of information technology work is that of an individual teamed with his/her PC grinding away at daily tasks. Indeed users often start out working in an independent mode. However, very quickly the need to seek information either through inquiry into a computer data base or inquiry into a "human data base" (asking someone) becomes an

important aspect of the work. As communications networks are available, the human data base inquiry is accomplished via electronic communications.

The resultant need to tie individual users to data and to other users is the driving force behind the telecommunications challenges today. Whether the links must be made within a building, a city or throughout the globe, a major design and implementation of the telecommunications infrastructure continues to be a technological challenge.

Organizational Challenges. In addition to the political problems discussed earlier, which will remain until adequately managed, organizational challenges will increase in the areas of education and changing management skills and roles. Education has consistently been a difficult area because users who need information technology to help them usually do not have the time to learn properly how to use the technology. It has also taken quite a while for education programs to be specifically designed for the upper level manager.

Early "education" programs were generally simply training sessions where users were taught basic mechanical skills. These programs were not necessarily developed by people who knew anything about training or education; often they were put together by knowledgeable technicians. As a result, support staff were poorly trained to use systems, and no one dared to expose management level personnel to such programs. Happily, typical of American entrepreneurship, many organizations have sprung up to fill this education gap. Opportunities are now available for quality education in information technology use.

Even as education programs play "catch up," they are continually dropping behind as managers' technical skills improve. In addition, managerial users are experiencing significant role changes with the advent of information technology. Line managers who have never used information technology are finding they have to manage people who do. We are also seeing decentralization of many formerly centralized information systems, which brings information systems management tasks to line managers who are inexperienced with systems.

All this means that organizations must be prepared for investing time and financial resources into continual education ranging from basic technology use to higher level management skills.

Systems of the Future. Predicting the future is something many would like to be able to do. At most we can suggest directions based on the ways in which people work, on technology development, and on what people say they want to do.

The most significant aspect of the way people work, which is just emerging as a direction-setting factor, is the notion of group work. The personal computer and its associated software were designed with the image of a single person working on a task and using tools to help him/her solve problems. The breakthrough software in personal computing was VisiCalc, a spread sheet tool that helps an individual do independent analysis and "what iffing." Most of the tools which followed were also designed with the single user in mind. However, when we look at the work getting accomplished in organizations, in many instances it is actually being done by a group: a task force, a project team, a collaborative writing effort, etc. Even when the task is being solved independently, at some point it is communicated to others in a formal presentation or written report.

A new research interest is emerging today -- variously called collaborative work, computer-supported groups, group work -- which focusses on the unique aspects of supporting a task when it is being performed by more than one person. This

includes both synchronous and asynchronous work, e.g. both meetings and independent tasks as part of group work. We can expect new information technology in this arena.

Some of the new directions for information technology are continuations of what have always been new directions: more power, less cost, human factor engineering. In this last category, researchers are still looking at ways to help people interact with computers without using keyboards. In addition, much progress has been made to make new software packages self-evident, eliminating formal training classes to a certain extent. Progress is always being made; however, total solutions are yet to be found.

Networking will certainly be an important part of future systems. In the same way that the telephone became a universal mode for communication, computer networking is growing in that direction. However, since standardization was not created through regulation, as it was for the telephone, many problems exist in interconnection and reliability.

Some of the technological advances discussed above also respond to what people have said they would like to do. Users want systems that are easy to learn and use, thereby avoiding the investment of time involved whenever something new comes along. Users want information hardware that is as unobtrusive on their desks as a telephone and just as "natural" to use. Users want to be able to send an electronic message to anyone in the same way a paper letter can be mailed to anyone. At the same time, users want to be able to control the amount of electronic mail they receive, i.e. set priorities for incoming mail and eliminate junk mail.

One of the most promising areas of research for future systems is the application of expert systems tools to the design of systems. Because the concept of knowledge engineering supports the notion of carefully understanding the task and the way the "expert" performs the task, this is one tool which goes a long way toward making systems relevant.

In the end, the challenges of the future remain the same as those of today: designing information technology to support the tasks being performed. It is by better understanding the work and making the tools easier to learn and to use that we will make future systems better.

Bibliography

Johansen, Robert. Teleconferencing and Beyond: Communications in the Office of the Future. McGraw-Hill Publications Company, New York, New York, 1984.

Markus, M. Lynne. Systems in Organizations. Pitman Publishing, Inc., Marshfield, Massachusetts, 1984.

Rockart, John F. and Bullen, Christine V., Editors. The Rise of Managerial Computing. Dow Jones-Irwin, Homewood, Illinois, 1986.

ASSESSMENT, ACCREDITATION, AND INSTITUTIONAL EFFECTIVENESS: IMPLICATIONS FOR OUR PROFESSION

(presidential session)

Donald J. Reichard, 1986-87 AIR President
Director, Institutional Research
University of North Carolina-Greensboro

Theodore J. Marchese, Vice President
American Association for Higher Education
and Executive Editor, Change Magazine

(This is an edited record of a session held in the Count Basie Ballroom of the Vista International Hotel, Kansas City, Mo., on Wednesday morning, May 6, 1987.)

Reichard:

During the early days of my term as president, I tried to decide whether the traditional presidential address was an honor or an obligation -- a necessity in order to convey the state of health of the Association and the art of our craft as institutional researchers or, perhaps, an anachronistic expectation to which there might be some reasonable alternative.

As one is prone to do under such circumstances, I turned for guidance to the addresses of my predecessors published in prior Forum Proceedings. The voices of 21 predecessors spoke with something less than total unanimity. On the one hand, the membership's expectations for the president's address were high. On the other hand, the realistic presidents' assessments of what they were likely to accomplish were somewhat more modest.

Meeting in Denver in 1982, Bill Tetlow described the membership's expectations as threefold: to assess the state of the art of institutional research, to examine the future, and to inspire the membership. Recognizing the difficulty of achieving all these objectives, Bill added that he would be quite content if his performance could be compared favorably with that of the cross-eyed javelin thrower -- who did not win many medals, but definitely kept everyone alert.

At the first AIR Forum I attended, also in Denver, in 1971, Sidney Suslow was less sanguine about what could be accomplished through the presidential address. He concluded that "presidential addresses once spoken are never read, and once read are never remembered." Bill and Sid have succeeded in lowering my expectations to the point that if, in five years, the membership forgets in whose term of office this session and related special Forum sessions were held but remembers and is more involved in the substantive area I have asked Ted Marchese to assist me in emphasizing, I will not be disappointed.

Today, I intend to depart somewhat from the format for presidential addresses adopted when the Association was formed. As Marilyn McCoy and Marv Peterson have done the past two years, I shall team with others in order to bring added emphasis to an area which we as an Association must address. I do not intend to evaluate the state of the art of institutional research or the health of the Association. Rather, I wish to draw attention to the substantive area of assessment, accreditation, and institutional effectiveness and to the oppor-

tunities involvement in these areas hold for us as institutional researchers and as an Association.

The area is not a new one for us. Institutional researchers have labored in the assessment and evaluation vineyards for years, as evidenced by Paul Dressel's 1958 book on Evaluation in the Basic College at Michigan State. The titles of earlier Forum Proceedings attest to the focus of institutional research orientations in prior years. The 1966 Forum Proceedings containing the first presidential address by John Stecklein were entitled "Research on Academic Input." The 1967 and 1968 Proceedings were entitled, respectively "The Instructional Process and Institutional Research" and "Institutional Research and Academic Outcomes." Joe Saupe's presidential address, "Assessing Program Quality," would be as timely now as when it was delivered exactly 18 years ago today at the 1969 Forum in Chicago. Indeed, I was greatly tempted to deliver Joe's address unchanged to see if anyone other than Joe would know.

Although present discourse on the themes of assessment, accreditation, and institutional effectiveness may sound familiar to long-time institutional researchers, the area has received less attention in recent years and the themes which are emerging come from several divergent and occasionally convergent streams of thinking, writing, and actions. In my letter of some months ago to Ted, I asked him, as a most knowledgeable observer of the current scene, to attempt to sort out how these themes have emerged in the nation's current discourse about higher education at the federal, regional, state, and institutional levels. A second focus for this and the other related sessions is to explore the implications of involvement in assessment for the practice of institutional research by those who actually carry formal institutional research titles and those who are functionally involved in institutional research within other offices -- the ever-elusive "invisible institutional researchers."

Some Definitions

Assessment. To provide some background and common terminology for those who have not been immersed in the area, I would note that assessment activities defy any simple characterization. At a limited number of private institutions such as Alverno College, assessment focuses upon feedback and the achievement of learning objectives. At the state level, emphasis is sometimes placed upon the demonstration of minimum competencies in order to provide a line of passage between high school and college or between sophomore and junior standing in college. Still other state-level assessment efforts, as in Tennessee, focus upon "value-added" in partial response to financial incentives provided by legislatures or state coordinating agencies. A third form of assessment, going back more than 30 years to the foundation of institutional research activities, is program evaluation and the evaluation of outcomes, pioneered in the General or Basic Colleges at the University of Minnesota and at Michigan State. In this sense, the theme of this session could be subtitled "IR Come Home."

Accreditation. Accreditation processes emphasize the assessment of individual learning as well as institutional outcomes. In the last two or three years, adoption of the Southern Association for Colleges and Schools (SACS) Criteria for Accreditation, especially Section III on Institutional Effectiveness, has focused attention on the need for institutions to demonstrate the existence of and evaluate ongoing planning, evaluation, and institutional research functions. The Criteria have been referred to by some wags as "The Full Employment Act for Institutional Researchers." The existence of regional accreditation criteria requiring institutions to evaluate themselves in relation to their stated purposes is not new. The demonstration of an ongoing commitment of resources to

assure that institutional research and planning processes are continuous rather than cyclical in nature places an obligation upon professional organizations such as AIR to assist colleges and universities in defining and evaluating such processes. Will similar criteria spread to other regional accrediting associations? What developments relating to assessment might be expected to emerge through changing emphases within the various accrediting agencies? Stay tuned.

Institutional Effectiveness. Attempts to define the term institutional effectiveness are diverse and perhaps reminiscent of efforts some 20 years ago to define institutional vitality. More recently, the Review of Higher Education's Special Issue on Institutional Effectiveness (Volume 9, No. 1, 1985), edited by Kim Cameron and Ellen Chaffee, has contributed to such discussions. To some, the call for institutional effectiveness is a cry for more effective leadership. The SACS criteria on institutional effectiveness are in the process of being defined. NCHEMS is offering seminars on institutional effectiveness. Clearly, there are a lot of mixed messages and varied reference points associated with the term institutional effectiveness. Identifying which dimensions of the term have particular currency and significance for institutional researchers is of special interest to our membership.

Importance of the Topic

This year, Forum Chair Gerry McLaughlin has been especially generous in allocating additional time periods to develop the special emphasis upon Assessment, Accreditation, and Institutional Effectiveness. On the heels of this session will be a follow-up seminar chaired by Richard I. Miller which will also involve Peter Ewell of NCHEMS and Ted Marchese. Later this afternoon, there will be a panel on accreditation moderated by Peter Ewell and a panel entitled "State-Level Initiatives in Assessment: Why and How?" chaired by Jim Mingle, Executive Director of the State Higher Education Executive Officers (SHEEO). Earlier this week, a special hearing was held to learn how AIR's various committees were working together to address common concerns and issues in this area.

Why this particular emphasis at this time? Because it is the right time for our institutions and for AIR as a professional organization to focus their energies in these areas.

For institutions, the topic of this session has currency not only from an institution's desire to formulate assessment strategies in response to internal priorities, but also because of an increasing array of external mandates. The focus upon accreditation and institutional effectiveness has been especially strong in the South due to the Institutional Effectiveness criterion contained in the Criteria for Accreditation adopted by the Southern Association of Colleges and Schools (SACS) in 1984.

The Institutional Effectiveness criterion of the SACS Criteria states that each institution must:

- define expected educational results and describe how these results will be ascertained
- engage in continuing study, analysis, and appraisal of the purposes, policies, procedures, and programs

The Criterion contains a specific sub-section on planning and evaluation. It also contains a sub-section on institutional research which concludes by stating that "Institutions must regularly evaluate the institutional research function."

The Criterion does not prescribe the methods of assessing effectiveness nor does it prescribe levels of achievement in any area.

H.R. Kells, Professor of Higher Education and Information Systems at Rutgers University, is a long-time influential participant, author, and observer of the accreditation process, as well as a charter member of AIR. He predicts that "Because of its national leadership in enacting the Criterion, SACS will also have an effect on all U.S. accrediting and, through it, all U.S. higher education institutions." It is evident, Kells notes, that "SACS means to proceed with a healthy focus on continuous assessment and planning and a complementary or constituent emphasis upon results or 'outcomes'." He observes that the new Criterion will require changes in how we study ourselves, in our institutional research capacities, and in the priorities of this study capacity and the data bases on which they are built. If we are to respond to the mandate to look increasingly and regularly at results, it will mean a reordering of priorities and investment in staff and systems. It also must mean collaboration, sharing, and joint development if we are to achieve the needed systems and efforts. Kells concluded, "Even if we take ten years to build the capacity to desired levels, we must do it."

Implications for the Association for Institutional Research

If the topic of this session is timely for our institutions, I would suggest that the time is also right for the Association to address the issues of assessment, accreditation, and institutional effectiveness. In doing so, we would be in line with several of the recommendations made by The Commission to Reassess the Purposes and Objectives of the Association and the paths of action which are emerging from our agenda-setting activities of the past two years.

Commission to Reassess the Purposes and Objectives of the Association. As many of you know, this task force was appointed by President Bill Lasher in 1982 and was asked to submit a report to President Sam Adams by the time of the 1984 Forum in Fort Worth. It was my privilege to chair the 12-member Commission, which made 10 recommendations. As I was not a member of the Executive Committee in 1984-85, it was my good fortune to pass on to Marv Peterson and Marilyn McCoy the primary responsibility for implementing the Commission's recommendations. Needless to say Marv, Marilyn, and their Executive Committees did a marvelous job.

I believe that further Association emphasis upon issues and concerns related to assessment, accreditation, and institutional effectiveness may speak, in part, to several of the Commission's recommendations which are still in the process of being redefined. Two illustrations may suffice.

First, the Commission and subsequent Executive Committees were concerned with increasing the visibility of the profession and the Association within postsecondary education. An enhanced visibility was seen as a prerequisite to increasing membership in the Association. Because in the United States, for example, only 998 of the 3,455 postsecondary institutions have individuals who are currently AIR members, the Executive Committee encouraged promotional efforts that provide a broader image for and understanding of institutional research.

Uppermost in the minds of the Executive Committee was the development of strategies to encourage membership by individuals who are: (1) not in traditional IR offices, but are involved in institutional research in functional areas such as planning and policy analysis, academic affairs, student affairs, budget and finance, governmental relations and development; (2) from underrepresented institutions, such as liberal arts colleges, community colleges and non-tradi-

tional postsecondary institutions, or (3) from system, state agency, consortia, associations, or research offices with an interest in research and analysis. If this Association establishes itself as the professional organization where the most productive dialogues with regard to the development, testing, and implementation of methodologies and strategies for addressing assessment, accreditation, and institutional effectiveness takes place, the universality of these concerns will surely encourage broader participation in AIR.

In my view, the Association is uniquely positioned to attract a greater degree of interest from "invisible institutional researchers" in the area of academic affairs. Indeed, we already do serve the area of academic affairs in part, if we can believe the findings of a 1981 Professional Development Services Board survey which indicated that 25 percent of our single-campus based members are currently employed in offices reporting to a vice-president for academic affairs. Our publications, especially New Directions for Institutional Research, monographs such as Peter Ewell's Assessing Educational Outcomes, and several recent issues in the Professional File series, have placed heavy emphasis upon assessment related concerns. A quick leafing through this Forum's program would show more than two dozen sessions, panel, and seminar session that would appeal to individuals coming to the Forum with a specific interest in assessment, accreditation, and institutional effectiveness issues.

Increased efforts to market specific sets of Forum sessions to specific target groups or to develop position round tables may be helpful. The panel at this Forum on "Institutional Research for Academic Affairs" and the contributed paper on "The Role, Scope, and Functions of the Chief Academic Officer" may be steps in the right direction. In pursuing such organizational aims, more creative thinking needs to be done.

A second area addressed by the Commission was that of "Promoting the Use and Understanding of Institutional Research." The Commission's recommendation stated that "The Executive Committee should establish a special task force to develop specific objectives and appropriate structures for encouraging political, administrative, accrediting, professional, and/or research organizations to utilize institutional research, policy research, and analysis techniques through the expertise of the Association and its membership."

One obvious application of this recommendation is establishing an enhanced working relationship with the Center for Education Statistics to provide input on the IPEDS implementation process, a subject addressed at our Annual Business meeting within the last hour. Another area of application is implementation of the SACS Criterion on Institutional Effectiveness.

The Association should be very concerned that its members play an important role in determining how such Criteria should be implemented, for in doing so, we are defining what the very nature of institutional research activity is and ought to be. Indeed, I am heartened that each of the three primary presenters at tomorrow's Post-Forum Professional Development Opportunity workshop on "Approaches to Implementing Institutional Effectiveness," organized by Jim Nichols, are AIR members who have served on an important SACS committee charged with developing the just-completed draft Manual on Institutional Effectiveness. Others within the Association, including myself, have been involved as reviewers of the draft Manual and/or as members of SACS visitation teams. We need to promote more of these types of involvements in the future.

Agenda-Setting. The Association embarked on active assessment of trends and issues in higher education as a first step in identifying major issues to be

addressed on a continuing basis through the Association's programs and services. Last summer, Marilyn McCoy conducted a survey of approximately 200 higher education opinion leaders. Results were conveyed to members of the Executive Committee, Publications Board, and Professional Development Services Board in advance of their joint meeting held in Chicago in early October. (See "AIR Agenda-Setting Survey of Higher Education Experts," September, 1986.) Also as background for the Chicago meeting, Vice-President Laura Saunders prepared an analysis of the substantive areas addressed through AIR Forum sessions, New Directions for Institutional Research monographs, and articles appearing in Research in Higher Education for the period 1984-1986. When combined with an earlier analysis of Forum content and NDIR monographs content prepared by Craig Johnson for the period 1979-1983, these materials constitute a valuable resource, charting the substantive development of institutional research as a profession.

Given the focus of this session, it should not surprise you if I told you that 264 of 724 (36%) of the issues identified in our agenda-setting survey of higher education opinion leaders were related to academic and faculty issues. Within this response category, the two most frequently cited issues were: 1) undergraduate teaching and learning, and 2) educational quality and assessment. Student issues constituted 136 of 724 responses (19%). Within this category, ability and access issues and demographic concerns were cited most frequently.

You will undoubtedly be hearing more about the agenda-setting process and activities which Marilyn McCoy initiated last year and Laura Saunders will carry forward in the year ahead. An open hearing on agenda setting is scheduled for this afternoon.

Let me summarize by reemphasizing that today's orientations in the assessment, accreditation, and institutional effectiveness areas represent a complex mosaic that conveys mixed messages to our Association. Are we concerned with setting admission standards, assessing individual learning outcomes, program outcomes, or institutional outcomes? Who is doing the assessing? How should assessments be conducted? What are the roles of AIR members in this process? What do NCHEMS and SACS mean by the term institutional effectiveness? To sort some of these concerns out, we are fortunate to have an individual with us who is a former institutional researcher and is currently at the forefront, nationally, of developments in the area of assessment.

Ted Marchese was born and raised in New Jersey and holds a bachelor's degree in English literature from Rutgers University, a law degree from Georgetown University, and a Ph.D. in higher education from the University of Michigan.

He began work in Washington, D.C., as a staff aide to U.S. Senator Clifford P. Case (1960-61), served on the early Peace Corps staff (1962), then worked at the American Council on Education as assistant director of its Commission on Academic Affairs (1963-65).

Following doctoral work at Michigan, Marchese spent 14 years at Barat College in Lake Forest, Illinois. As a faculty member, he taught statistics, social research, and the law of crimes. Our 1976-77 through 1979-80 AIR membership directories list Ted as Director of Institutional Research. Other administrative assignments included planning, government relations, accreditation, and various forms of project work. From 1979-82, he served as Vice President for Administration at the College.

At AAHE, Marchese's responsibilities since 1982 have been in the areas of publications and conference management. He edits the AAHE Bulletin and is

executive editor of Change magazine. He has tracked the assessment issue for AAHE since 1985, and organized, with NIE support, the first National Conference on Assessment in Higher Education that fall. AAHE has since become a center point for information about assessment; in my own attendance at three national conferences on assessment in the last year, Ted Marchese has been the lynchpin. He has addressed a dozen state and national conferences on the topic in the past year.

AAHE's latest venture is the AAHE Assessment Forum, a three-year, FIPSE-supported project of meetings, field reporting, and information sharing. The Forum will mount a second National Conference on Assessment June 14-17, 1987 in Denver, with a focus on campus implementation.

Ted, it's yours.

Marchese:

In response to Don Reichard's charge, I plan four things in these remarks. First, I want to talk about the emergence of assessment as an issue, and ask whether it is a fad, then what its residue of meaning will be for our institutions. Second, I want to look inside this thing called "assessment" at the variety of things parading under its banner and ask, "What are its assumptions?" Third, I want to look briefly at the history and character of institutional research, as Don has done, and ask about IR's relationship to the phenomenon of assessment and to assessment's spin-offs in institutional accreditation. Fourth, I have several recommendations to you as colleagues who do institutional research and are worried about assessment. Let me begin right off with the first of these four questions, that of assessment's meaning as an issue.

In the largest sense, assessment is where the quality debate in higher education wound up. The quality debate is in about its third year. I think it may have two or three more years to run, the way these things come onto the stage and go off; so, indeed, the quality debate may be half over. The question, then, is what's going to be left behind. I think assessment is one of the things that will be left behind. The issue to me is, "Will the assessment that is left behind have any impact on quality?"

The debate about quality in higher education was triggered in part by a series of recent national reports. These are too familiar to you to review here, but I want to acknowledge a person who has been on this platform many times, Alexander Astin, whose book, Achieving Educational Excellence, and role in the preparation of the NIE report have been very influential in the evolution of our sense of what quality means. What you find in the NIE report (and in the AAC report) is a new feature in the discourse about quality in higher education, the idea that quality should be judged not on the basis of reputational rankings or on the basis of resources -- so called inputs -- but on the basis of contributions made to student learning, the "outcomes" we bring forth in students.

You all know that this is far from a new view; yet it is one with profound implications. It implies, among other things, the doing of assessment, that we know more about our contributions to student learning, that we get our eyes systematically on the effects of teaching and learning and of programs. What's new is not the idea of outcomes; that's been in our textbooks a long time. What is significant is that in the past year there seems to have been a shift in the

way a broad spectrum of people now talk about quality in higher education; the notion that outcomes should be a chief indicator of quality seems to have taken hold. The recent book by Derek Bok, Higher Learning, and Ernest Boyer's College both presumed such an outlook. The assessment of student learning and institutional effectiveness seems to have become part of the way people both within higher education and outside of higher education think about quality. That is an historic shift with profound implications.

The debate about quality and its meaning has played itself out in many quarters, not the least of which is within our own mechanisms of voluntary accreditation. Those mechanism, especially those of regional accreditation, are weak and held in low regard. What you will hear when you talk with colleagues on campus and people in state houses is that voluntary accreditation "doesn't do that much to promote improvement or to curb abuse." There is a big tendency today to "write off" accreditation.

A notable phenomenon of the past two years has been the way accrediting agencies have seized on outcomes as a new handle for potential influence. The Southern Association of Colleges and Schools got a lot of publicity a couple of years ago by enacting a new criterion requiring "evidence of effectiveness" in all institutional reviews. "We had that all along," many of the other regionals said, and indeed they did. But where was it? Honored in the breach, as they say. I personally doubt that even a new focus on outcomes can revivify regional accreditation or that its new or dusted-off standards will greatly affect institutional conduct.

Where we will feel an affect from a new focus on outcomes will be through specialized accreditation. Specialized accreditation is going to move inexorably to an outcomes approach because of internal dynamics but also from external pressure from the National Advisory Committee on Accreditation and Institutional Eligibility (NACAIE), the U.S. Department of Education body that "recognizes" accrediting agencies for purposes of triggering institutional ability to handle federal money (a very important lever). NACAIE has already recommended, and the Secretary of Education will probably endorse, a requirement that any accrediting association, in order to be on the secretary's eligibility list, must have outcomes as its primary basis for program approval. That will make a difference to our institutions, because these specialized accreditors do have clout. They will be the chief bearers of outcomes assessment onto our campuses.

Let me return to assessment. Its momentum comes not primarily from our internal debates, national reports, or regional accreditation, but from an external quarter: the states. We've had a remarkable string of bright, aggressive governors during this decade; I refer to Governors Alexander, Kean, Babbitt, Ashcroft and Clinton, who have driven programs of educational reform at both the K-12 level and the postsecondary level. They built those programs around education's potential to build a competitive work force. What's on the minds of these governors is jobs. They want a more talented work force for job creation and economic growth, and to get that they want student performance to be at higher levels, implying that schools and colleges must perform at higher levels, and to get that they want assessment, which they see as a way to monitor and prompt improvements in quality. We saw a phenomenon of state-mandated "assessment" earlier in the schools (defined as statewide standardized testing); in 1985, Colorado became the 50th and final state to mandate statewide tests at the K-12 level.

Now we've begun to see a spillover into the postsecondary level. The first states, in the early '80s, tended to mandate top-down, statewide programs. You

know the familiar stories of what is happening in Florida, Georgia, Tennessee, South Dakota, and New Jersey. Beginning in about 1985, there was an outcry against broadscale, test-driven state mandates (led in significant part by AAHE).

A newer pattern has emerged during the past year, and that is to abjure a single, statewide approach and rather to ask or demand that institutions come forward with individual plans. This is the pattern that we see unfolding in Virginia, Connecticut, Colorado, and a number of other states. Another key fact is that a year or two ago we might have been talking about six to eight states that were doing something in the name assessment; now we are looking at about 35 states.

At the state level, this movement has been fueled by reports from the National Governors Association and the Education Commission of the States. The interesting thing to me is the questions these gubernatorial bodies are asking of higher education. What the governors are asking is, "Do your curricula add up to the performance we need?" How do you know? Do your graduates know and can they do what your degrees imply? How do you know they do?

Several comments seem apt. First, these are reasonable questions. We should be able to answer them; at some point we will be professionally embarrassed not to be able to do so. They are really the same questions, although in different language, that we have been asking ourselves in our own reform movements.

A second perspective is that governors and legislators don't start with the view that conditions are terrible in higher education (as some state enactments directed at high schools have presumed). They sense, by and large, that we are doing a good job most of the time with most of our students. But they think we are so important to an abler, more competitive work force that we need to be called to even higher levels of institutional and student performance.

Third, by and large the subject-matter competence of our graduates is not at issue. People are not saying, "Your chemistry graduates don't know chemistry." (The one exception is teacher education.) Rather, the unease has more to do with the general qualities of our graduates, their abilities to think, to write, to create, to work with others, to solve problems -- all the things that are supposed to be part of the higher-order abilities people expect in a college graduate.

Fourth, when you look more deeply into the present state of knowledge about how to do assessment -- especially assessment that does more than document quality, i.e. improves quality -- you find a pretty bare cupboard. There are a handful of institutional examples, but little basic research, little evaluation, and quite a small professional community engaged with the issue. There's little in the way of imminent new funding, nor is there much to learn from the K-12 experience. You can get discouraged about all this, yet we are a lot further along today than we were 12 months ago with a knowledge base for postsecondary assessment. Even so, a lot of the claims being pushed by policy makers are coming at us on the basis of a knowledge base that remains thin.

One last thing: some of the best knowledge we have about the doing of assessment and its effects is not contemporaneous but is from earlier decades. It was done by people who were founders of the work that came later to be known as institutional research. But as I look today across the small professional community working in assessment, I find very few IR people in the lead ranks.

The second main section of my remarks looks inside the black box to ask, "What is this thing called assessment? What's going on in its name?" My answer is that

assessment is no one thing. What we see today is a series of different lines or traditions of work, five in all, to which we can look as a source for ideas.

The first tradition or relevant line of work is that of assessment as an adjunct to pedagogy. This grew out of a process known as the assessment-center method. You all know that the '20s and '30s were the great era of standardized testing. This proud new tool of the psychologists promised an inexpensive, easily grasped, and scientific way of screening and selecting people, whether for a college or for a job. (The SAT began in 1926, for example.) In the late '30s there was a reaction against testing among academics in the United States, England, and Germany; they argued that human performance was too complex a phenomenon to gauge with paper and pencil tests alone, that if you wanted to select people for something, you had to look to their demonstrable abilities to perform. Since there were observable aspects of performance, they urged creating conditions under which a candidate's performance could be observed and judged.

That was the theory; the big trial came in 1940. The British army had a problem. It needed thousands of new officers, and there were not enough people with the old college ties to pick the trainees that way. So they set up a process in which the backgrounds of candidates were looked at carefully; they were extensively interviewed; they were indeed given some tests; but the centerpiece was a set of contrived performance situations in which candidates, for example, had to improvise an escape, give a morale speech and so on. These performances were judged by trained observers; then all these samples of performances were pooled and judged again by trained experts, and then people were selected or not on the basis of those judgments.

It seemed to be a successful and more rational, powerful way of selecting people. And so our OSS used it during the World War II beginning in 1943, to select spies. A book was published about the OSS experience called The Assessment of Men, in 1949; it claimed performance-assessment was a big success. In 1954, a man named Douglas Bray set up an "assessment center" at AT&T. The corporation recruited thousands of new employees every year, and its problem was familiar: how do you select the people that should go forward for management training? The very good thing they did was to put in place a longitudinal research component. As the results came out, they were very suggestive and positive. Other corporations were impressed and the use of assessment-center technologies for managerial selection became commonplace in the '60s in business, industry and government, with notable assessment centers at IBM, SOHIO, Sears, and J.C. Penney. The tools of these assessment centers are almost the same today as those used by the British Army in 1940; the "inbasket" is the major new thing added since and even that is now 35 or more years old.

In the late '60s and early '70s the interest of educators, mostly faculty members, was drawn to this work. But the educators' questions were different: it was not a matter of how to identify and select competent people, but how to develop and educate competent people. They wanted to educate for "effective performance." So they added to the industrial model an old educators' concept; feedback to the learner. They didn't want just to document abilities for the purposes of selection; they wanted to improve those abilities. They wanted to understand components of performance at a deeper level and educate for them. Therefore, they didn't see assessment as a one-time, stand-alone event. They saw it as part of the teaching process one does over time. What the new assessors in education also saw was that assessment forces one to begin with explicit statements of desired outcomes, then that these must be pushed back into individual classrooms and programs. There, teachers must set clear and high expectations built around those outcomes, involve students in tasks relevant to those out-

comes, and advance student growth with the help of continuous feedback. Sounds like the NIE formula, doesn't it? "Involve students in their learning, set high expectations, assess and provide feedback"...that's a good summary of the NIE report, Involvement in Learning.

At the classroom level, assessment becomes a powerful adjunct to pedagogy aimed squarely at improving student performance. Where is this going on? The answer is, not too many places. At the institution-wide level there is Alverno College. But most of what goes on happens within individual programs. The best examples arise in medical education, nursing education, architecture, and so on, mostly in programs of professional education in large universities.

There is a research literature that has grown up about all of this. I think that most of you would be familiar with Donald Schon's work on components of professional effectiveness and on the learning-doing nexus. There have been very important evaluation studies done at Alverno. We also have the McBer studies on teachable abilities and, back in the corporate sector, the Center for Leadership Development in North Carolina has done studies on the teachability of managerial effectiveness. (The answer is lots of these abilities are teachable.)

Let me recapitulate the premises of this approach to assessment. Assessment center people begin always with an eye on an intended future performance, on an outcome; whether you want the person to be a spy or an architect, you've got to be very clear about what you are selecting or educating the candidate for. Secondly, there is a continuous use of multiple measures repeated over time. Third, there is feedback to the learner to improve performance. The goal of it all is to educate learners who self-assess, who become what Donald Schon calls "reflective practitioners."

The second tradition or line of work is assessment as program evaluation, that is, the evaluation of outcomes for a particular curricular segment. There are many earlier examples I could give, but let's start with the University of Minnesota general college evaluation studies done 45 years ago by Ruth Eckert and Bob Pace. They began with the question, "How effective is our general college curriculum in achieving the university's goals of general education?" Note that the unit of analysis is at the program level; this is not a study of individual students. There was an insistence in those Minnesota studies upon evaluation based on clear goals. Multiple measures, many of them repeated over time, were used. The intent was strictly internal and formative, to generate information that could be fed back to the improvement of practice. Studies like this were done at the University of Chicago in the 1940s by John Dale Russell and others. (There was an important link, there, with the North Central Association, which had offices on the campus of the University of Chicago until about 15 years ago.) At Michigan State, there were the studies that Don has referred to by Paul Dressel in the '50s and '60s.

It is hard to find large-scale, longitudinal studies of this type in more recent years; there hasn't been university sponsorship for them. People who regard their professional field as evaluation seem to have moved off campus to work in other fields where there are patrons and people who want their work. They have been busy investigating head start programs, health-care delivery systems, the impact of Sesame Street on kindergartners, etc., but they have not been doing those kinds of studies on college campuses. What we are left with is a spotty record of continuity, plus a handful of instruments left over from earlier work, such as the IFI and the IGI. "Assessment as program evaluation," then, today stands as an underdeveloped arena of work.

We should note here that the field of institutional research came out of this tradition of work, before it moved to more administrative functions; more on this point later. Today, the premier example of this approach to assessment is certainly the University of Tennessee at Knoxville, led by Trudy Banta. At UT, they have pushed assessment down into all the departments and programs of the university; it's more akin to "program monitoring" than it is to the traditions of "program evaluation." It is iterative, formative, and largely self-conducted by the individual units. Another example is the work of Dick Light, a professor of Kennedy School at Harvard and head this year of the American Evaluation Association. He's doing a seminar at Harvard at President Bok's request. One subject of investigation is the impact of Harvard's writing courses on students' ability to write -- a classic assessment program and evaluation question.

A third tradition or line of work is academic research on aspects of student learning and growth over the course of the four years of college experience. These studies begin with questions like, What happens to students as people as a result of their college experience? How do they change in values, attitudes, motivation? How do they change cognitively? What is the impact of the college or its programs on student development?

As you all know, this is a long line of work, dating to the '20s and '30s. It was capped by Nevitt Sanford's The American College (1962), and by Newcomb and Feldman's The Impact of College on Students (1969), which contained more than 1,500 citations, and by Alexander Astin's Four Critical Years, which appeared 10 years ago. This, too, is a line of work that has not been very active in recent years; the fruits of it, while of high intellectual interest, offer scant help to administrators or faculty who are looking for practical answers. This research often was driven by agendas internal to the disciplines of psychology, sociology, and social psychology. Students were the available guinea pigs for its studies of peer-group influence, personality development, and so on. This wasn't research sponsored by institutions. It wasn't research that sprang out of questions of legislators. It wasn't research that sprang out of questions that actual classroom teachers had. So that if you take the instruments that many of these people used or developed -- the OPI, for example, or the old College Student Questionnaire -- what you get is information about student growth in "peer independence," for example, answers to questions that nobody is asking and information that nobody knows how to use.

In a way, the culmination today of research on student development is the value-added concept, which very properly shifts the focus of quality from program resources to program results, and which asks a good question of a college: What is your contribution to student learning? But the value-added concept is too often left flailing around when it comes to implementation, because of the shortcomings of the prior research, weak instrumentation, and by its tendency to generate information that you don't know what to do with. I must add also, that the institutions that have pushed their way into value-added questions (e.g. Northeast Missouri State University and SUNY Plattsburgh) realize these limitations, but have found ways to use the information anyway, if not psychometrically in the purest way, at least in very productive and generative ways.

The fourth tradition is that of standardized testing. Standardized testing enjoyed a great vogue in the 1920s as part of the efficiency movement in American education. Here at last we had a cheap, efficient, scientific way to gather information about student abilities and achievement so we could put students in tracks and help select them for college. When we added the concept of norms we could compare students with one another, or even schools with one another, or states or nations. To give all of this a nice name, the testing industry and

state officials for at least the last two decades have called this kind of mass, statewide testing "large-scale assessment." That usage has become so common, given the universality of this practice at the K-12 level, that some people in higher education think the word "assessment" means statewide standardized testing. (It doesn't, but that's the connotation people hold).

The outstanding institutional example of testing calculated from the start to tell a story to external publics is Northeast Missouri State University. It uses only standard, norm-referenced tests -- tests that often have little relationship to their instructional systems but which have been used effectively to show the public that: a) Northeast Missouri State will be accountable; b) its students are learning something, and c) it is improving each year.

The fifth tradition is that of the external senior examiner. This is a British tradition, still widely used in England today. In the United States, it is most notably practiced at Swarthmore. The idea is that within a discipline, let's say English, faculty from other comparable English departments will be brought in to examine in a comprehensive way, in writing and orally, the senior English majors of the host institution. The technique provides a capstone experience for students plus feedback on their performance. It provides feedback to the host department and informs the institution about the department's performance. The device employs nothing but expert peer judgment. It forces the department to be clear with itself, with students, and before the examiners about what it is that it is trying to accomplish. It provides very little information to the general public that is useful in any accountability sense. It does illustrate a form of internal professional accountability captured by John Harris's phrase, "Somebody besides the cook should taste the pudding."

To test this kind of assessment further, there is a big experiment involving 18 colleges and universities going right now, funded by FIPSE, and led by the Association of American Colleges. What runs through these five assessment traditions? What you see in every case is a focus on outcomes. Those outcomes are expressed in terms of a desired performance. The performance is usually criterion-referenced. Let me give an example that cuts across the five traditions and conveys the spirit of it all. To a college that cared about student writing and held it as an important goal, it would be insufficient to do as we have done in the past when we merely added up the credit hours and said, "Every student has to take two courses in English Comp and pass them with at least a C." The new perspective would be to say, "We care about student writing. Students have to demonstrate to us that they actually can write at such and such a level before they are going to graduate." It is that change in perspective that assessment brings about. Running through these traditions, too, there is an aspect of accountability to people outside the unit. Assessment is formative; it is as complex and nuanced as that which we educate for. It relies upon expert judgment. It seeks improvement through the device of feedback. The goal in every case, whether it be assessment at the program level or with individual students, is to build habits of self-assessment.

In this third section, I want to look at the evolving character of institutional research, and lay that character against today's demands that we assess.

The histories of both IR & assessment dribble back to the early years of this century, but I want to pick up their stories in the 1930s. That was a decade, like the present, marked by economic worries and by a corresponding attention to the quality of our educational systems. Quality concerns led many major universities to set up faculty-dominated offices for the purpose of doing educational studies. A typical title was "Bureau of Educational Research." These offices

existed through the '30s at most of the Big 10 institutions, at the University of Chicago, Syracuse, Antioch, San Francisco State, Florida, Stephens, Chicago City Junior College, Western Washington, Drake, and so on.

In 1948, the University of Minnesota renamed its office "Bureau of Institutional Research." In succeeding decades, IR became increasingly, perhaps necessarily, an adjunct of management, concerned less and less with academic affairs than the issues of institutional administration. IR entered into an era of space-utilization studies, student-flow analyses, load studies, cost studies, then market analysis, and so on, while, at least at the campus level, studies of educational development all but dried up. (I am indebted to C. Robert Pace's 1977 work, Measuring the Outcomes of College, for much of this information.)

I do not conclude from this that IR somehow went astray, or that today's IR office is a poorer cousin of its predecessors, or that you and I should somehow take up educational studies or be "untrue" to our history. What I do observe is this: that an essential requisite for a well founded, contemporary program of assessment requires something like those old bureaus, that is, an on-campus locus of expertise for the planning, conduct, and use of assessments. Such an office reflecting what we've learned from successful campus programs -- would have a broad expertise, often offered on a consulting basis, a budget, close faculty ties, an educator (not a technician) as its head, and reporting arrangements tied into academic and fiscal decision-making. You can see such models in the Office of Research and Evaluation at Alverno College, in the IR office at Miami-Dade, in the Learning Resource Center at The University of Tennessee-Knoxville, and emergent in the new "second-wave" programs at SUNY-Plattsburgh, Clayton State in Georgia, James Madison University, and Kean State. Bob Diamond's work at Syracuse Center is also instructive. When you look closely at those institutions that have become the leaders in institutional assessment, you see an office that looks a lot like what Ruth Eckert, Bob Pace, Bob Keller and later John Stecklein had going at Minnesota many years ago. What goes around comes around!

My point, if I may summarize, is this: a need, an opportunity, exists for assessment that somehow will have to be met. Whether it will be by you or others I cannot say, but surely IR should have a hand in the creation, or re-creation, of a function that should never have been let go.

And so I come to a fourth point and the question, "What can IR bring to the practice of assessment?" Five things, let me suggest.

The first tool to bring is a skeptical but open mind. We need to be skeptical because so much noise is being made on behalf of so little concrete knowledge. Whatever we do know or don't know, our lack of an appropriate knowledge base will not hold back demands that we get on with outcomes assessment, which leads me to the other side of this point -- a hope that you'll not allow premature closure of the mind about assessment. For me, pressures to assess are a train moving down the track at 80 mph. We are learning things, and what seemed improbable or impossible up to now may indeed be do-able. For example, for years people have complained about the ACT Comp and said there was no good instrument for measuring general education outcomes. Boom, ETS gets in gear, and in four months has just produced a new instrument meeting many of the objections and opening new vistas for institutional analysis.

Another set of land mines is that, while there are five or more traditions of work going forward in the name of assessment, there are also schools and advocacy groups that claim the important insight. You'll hear people talk about program evaluation or program review as though that were the real thing, others who

insist that assessment is really about standardized testing, or that value-added is the only real, appropriate analysis, or that criterion-referenced measures are the only permissable kind, and so on. Each statement brings an insight, but mostly about its maker, for the field offers a rich, expanding range of approaches that I hope you'll be open to in a non-ideological way, lest premature closure of the mind occur and important options be denied your institution.

My second hope for IR involvement is that you'll not lose "management sensibilities" in taking a hard look at the assessment options before your institution. Why are we doing X, not Y, in the name of assessment? What will it cost? How will it advance our mission? What's the opportunity-cost raised by doing or not doing a certain step? Far from looking negatively on the course of IR over the decades -- the shift from academic to management affairs -- I'm calling that shift an asset and asking that the decision criteria you apply to any IR you do be applied full bore to this new thing called assessment. I recall a speaker ask at the Montreal Forum, "If we knew the answer to that question, what would we do with it?" That is a terrific question to hold in mind for assessment proposals. Someone might propose, for example, an ethnographic study of student culture. Sure, I'd like to see such a study; but whatever would administrators do with its results? My suspicion is that you'll find a larger audience and real use for studies of program effects on student writing or of general education outcomes or of your teacher-education function. These are mundane matters, to be sure, but they are crucial parts of academic functioning and key areas that need improvement.

My third hope is that the planning skills you've brought to your offices and work will be brought to bear on your encounters with assessment. I say this because assessment is not unlike any other major new undertaking a college might get into, such as a new building, academic program, or budgeting system. It raises issues that start with mission, it takes you back to purposes, it demands clarification of goals, it requires involvement of stakeholders, it requires that choices be made, that funding follow, and that there be a plan to monitor results. I other words, we're talking planning, a point grasped from the start by the institutions with long-term success in assessment, but one that some of the next wave, amidst a lot of flailing around and false starts, have skipped. Don't skip it.

One more example: to meet in full faith the SACS criterion for studies of effectiveness, a college would have to start five years in advance to collect and show good use for the requisite information, and do those processes of inquiry continuously, year in and out, to meet the spirit of the standard. Assessment doesn't work well (or even make much sense) done as a one-time, stand-alone function. You can't decide in May to have a significant outcomes study ready to show the world by next fall. Assessment takes time, it implies choices and a longer-term commitment, which means that planning for assessment has to occur.

Fourth, I hope IR will bring to assessment a needed sense of technical requirements and of technical limits. I say that because I've seen incredible, terrible things done in the name of assessment, as though no one had ever heard of validity and reliability, or of using tests for the purposes they were intended. I've seen people draw preposterous, harmful conclusions from single data elements. IR people, as managers with a research background, can tell campus leaders who would otherwise throw instruments around of the "Standards for Educational and Psychological Testing" of the APA/AERA/NCME, or of the ETS "Standards for Quality and Fairness." Where program evaluation is the issue, IR people can disseminate the "Standards for Evaluation of Educational Programs, Projects, and Materials" and keep in the discussion some sense that assessment

(like any technology) raises very real methodological and ethical problems. Simultaneously, as practical people, you may have a role, too, in keeping presumed experts at bay. The objection to any plan can (and will) be raised that it is imperfect, that there's a better way to be invented soon, that invokes grounded theory and will use LISREL analysis, etc., none of which can be done for another three years or at a cost of less than $300,000. If you wait for the perfect approach, you'll never do anything. The need is to start a process of inquiry that can improve over time and generate along the way information good enough not for a journal but for the better deployment of instructional resources.

Fifth, and last, beware of the trap of seeing state or accreditation demands to assess as simply a new reporting requirement. To view them simply as a mandate to document student learning will backfire on you, especially if you disconnect that assessment mechanism from any internal process for improvement. What's at stake is not some new requirement to send numbers to the state capital, but what those numbers mean. People will be asking, "How good is the level of achievement those numbers document, and why aren't they improving this year over last?" What you do in the name of assessment has to be linked to internal improvement agendas.

Let me conclude these remarks back where I started. I think that in the next three years we're going to see assessment become a permanent part of our landscape, of the way we do business in higher education. The jury is very much out, however, as to what it will mean. At its meanest level, it might become little more than testing and a reporting requirement, tokens offered in the name of accountability. At its best, assessment can become a rich set of powerful tools that push us and our students to higher levels of performance. Your wise participation in our collective engagement with this issue called assessment can make a significant difference in that outcome. I urge you to it.

AND FINALLY . . . THE AIRTONES

Picture courtesy of Everett Beeson Photography, Overland Park, KS.

Accompanied at the piano by "Peggy Sue" -- a.k.a Linda Hannering -- the Airtones entertained themselves and all others attending the Awards Luncheon in the Count Basie Ballroom of the Vista International Hotel on Wednesday, May 6, 1987. They are, from left to right: Don Norris, Vice President of the M & H Group, Herndon, VA; Greg Lozier, Executive Director of Planning and Analysis, Pennsylvania State University; Bill Lasher, Associate Vice President for Budget and Institutional Analysis, University of Texas-Austin, and Richard Harpel, Assistant to the Chancellor and Director of Planning at the University of Colorado-Boulder.

Their medley went more or less like this:

Best Fact Book
(to the tune of "Book of Love")

I wonder, wonder, who wrote the best fact book?

Tell me, tell me, tell, oh who wrote the best fact book?
I've got to know the answer, will you help me look?

I love my data, baby you know I do,

But I've got to find the best fact book,
And make mine better, too.

Chapter one's about students, you love them with all your heart,
Chapter two's about faculty, they'll never, never, never,
never depart.
In chapter three remember the importance of finance.
In chapter four you break ground to expand your physical plant.

Data, data, data, I love you, yes I do;
And I'll put you in my new fact book so others can love you, too!

I wonder, wonder, who wrote the best fact book?

Puttin' on a Ruse
(to the tune of "Puttin' on the Ritz")

Policy analysis, information anarchy,
Data base technology, enrollment management,
Market segmentation, resource reallocation,
Cohort analysis, and computer graphics.

User friendly software, decision systems,
Academic governance, too.
Puttin' on a ruse.

Forecasting and modeling, external reviews
and self-studies are great, too.
Puttin' on a ruse.

Environmental scanning and planning,
Value added education, outcomes, accreditation;
Information specialists, BITNET, PCs, and data base
are what you get.
Puttin' on a ruse.

Now that the Forum's Over
(to the tune of "After the Ball")

Now that the Forum's over,
McLaughlin lets out a big sigh,
Melodie Christal's anxious,
Deb Teeter cries, "Kiss it goodbye!"
Many a paper's been given,
The sessions all were great.
Now we invite you to join us,
In Phoenix in eighty-eight!

AIR PUBLICATIONS

Regular AIR publications include:

Research in Higher Education

New Directions for Institutional Research

AIR Professional File

Some of the papers presented at each annual Forum are published in Research in Higher Education or the AIR Professional File.

Suggestions and offers of assistance may be sent to the chairperson of the AIR Publications Board or the AIR Executive Office.

AIR Publications Board
Penny A. Wallhaus, Chair
Office of Analytical Studies
Northwestern University
633 Clark Street
Evanston, IL 60201
Telephone: (512) 491-4335

AIR Executive Office
Jean C. Chulak, Administrative Director
314 Stone Building
Florida State University
Tallahassee, FL 32306-3038
Telephone: (904) 644-4470